BLAUPUNKT

11955

Video Recorder
RTV-966HIFI

S-VHS 625 VHS PAL SHOWVIEW

Video

Bedienungsanleitung **Operating Instructions**

VQT5461

Before operating the unit for the first time

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Before operating the unit for the first time

Important Information

For Your Safety

To prevent short circuits and electric shock, protect the VTR from high humidity. Never open the cabinet. There are no user-serviceable parts inside. Consult a technician for servicing.

Caution!

The VTR is completely disconnected from the AC mains only by pulling out the mains plug.
This model conforms to the EC directive (for radio interference protection) 87/308/EEC.

General Notes

- Do not use the VTR immediately after bringing it from a cold place to a warm place or vice versa. Leave it turned on and wait until it has adapted to the surrounding temperature.
- If the VTR does not function correctly, first review the notes **"Before Requesting Service"** on pages 107 and 108.
- Note that recording (copying) pre-recorded tapes, records or other published material may infringe copyrights.
- A direct shock by lightning to the VTR may damage the antenna system or the electric network. This can only be prevented when you disconnect both the antenna plug and the mains plug.

Supplied Accessories

1 Remote Controller RTV-966
2 IEC R6 size batteries for Remote Controller
1 Aerial Cable
1 Audio Cable (PHONO)
1 Mains Cable
1 Edit Cable
1 S-Video Cable

Optional Accessories

Ask your dealer for more information about the extensive lines of accessories.

Write down the unit's serial number to make identification easy in case of theft. The serial number is on the unit's back.

Type **RTV-966**

Unit No. .....

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Before operating the unit for the first time

Video Recorder at a Glance

TV Programme Reception

- This VTR is capable of cable TV reception, i.e. it can receive all programmes that are fed into a cable TV system.
- It can receive, record and play back TV programmes in the **PAL B/G** colour standard (colour system) (eg. broadcasts in Germany, Denmark, Italy, Holland, Austria, and Switzerland, among others) and in the **Secam B/G** colour standard (e.g. broadcast in Greece).
- If a corresponding decoder is connected to the Euro AV Socket of the RTV-966EGC, it can receive and record the coded TV programmes.
- It can store TV stations on 99 programme positions.

ShowView System

The new programming system "ShowView" makes programming timer recordings quick and easy.
You simply enter the ShowView number listed in the programme schedule column carried by newspapers and magazines.

Programming of Timer Recordings

Programming for automatic recording is possible for 8 TV programmes which are broadcast:

- within one month.
- every day or every week at the same time.

VPS (Video Programme System)

Some TV stations broadcast a VPS signal in addition to each TV programme.
When a timer recording is controlled by VPS signal, the VTR is turned on and off by the TV station. This ensures that the VTR is turned on and off at the correct times even in the event of a programme delay, so that the entire broadcast will be recorded.
If the TV station broadcasts a VPS signal, timer recording on the RTV-966EGC is controlled by the VPS signal.

- When a broadcast with VPS signal is received, the indicator "VPS" lights up.

S-VHS System

The S-VHS system was developed from the VHS system. By processing the chrominance and luminance signals separately, higher resolution and higher picture quality are achieved.
If an S-VHS recording is played back on an S-Video TV set, an optimal picture quality is obtained.

Recording Possibilities

- With normal tape speed (SP=Standard Play)
- With half tape speed (LP=Long Play)

Search System

Using the Index Search, you can quickly locate certain tape positions, scenes or TV programmes on a cassette.

- Index Search

Playback Possibilities

- Super Still
- Cue (multiple playback speed, forward direction)
- Review (multiple playback speed, reverse direction)
- With the Shuttle Ring the playback speed can be adjusted in small steps between Still and Cue/Review playback.
- With the Jog Dial the desired picture can be exactly located.

Tape Running Time Indicator

- The elapsed tape running time is indicated in hours, minutes, and seconds.
- The remaining tape time is indicated in hours and minutes.

NTSC System Playback

Video cassettes recorded in the NTSC colour TV system can be played back on an ordinary PAL TV with this VTR.

Editing

- This VTR is equipped with a built-in editing controller. You can programme up to 10 scenes in the assemble editing, insert editing, AV insert editing and audio dubbing modes.
- Socket for Synchro Editing.
- Socket for connecting the Editing Controller TES-200.

Hi-Fi Audio System

This VTR uses several audio tracks.

1. **Hi-Fi Audio Tracks (Stereo)**
   - For mono, stereo and bilingual TV broadcasts.
   - For use as a top-quality Hi-Fi audio tape deck, with 8-hour recording.
2. **Normal Audio Track (Mono)**
   - For audio playback on a mono VTR.
   - For audio dubbing.

Getting started

Notes on Installation

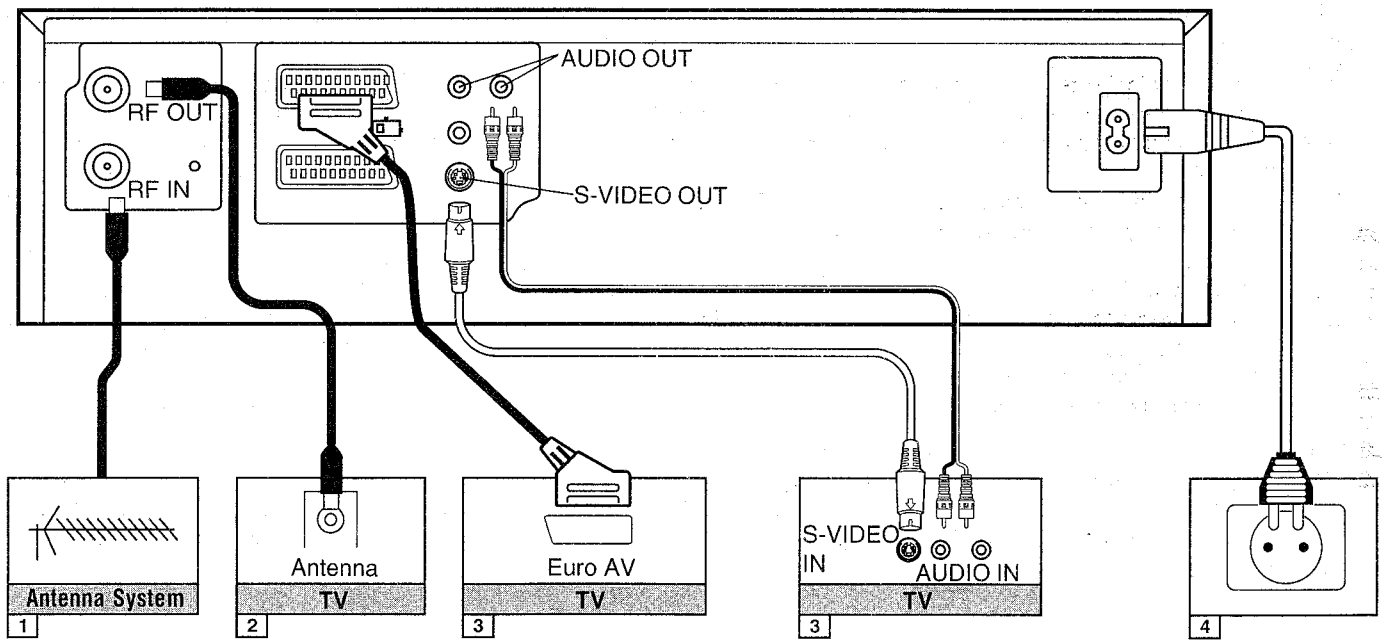
- Place the VTR on a stable and level base.
- Do not install the VTR near equipment generating a strong magnetic field (e.g. electric motors, transformers, loudspeakers).
- Do not place any heavy object on the VTR and be careful not to block the circulation of air.
  The ventilation slots should not be covered!

Notes on Connection

There are several ways of connecting the VTR to a TV.

- Connection to a TV with a 4-pin S-Video Socket
- Connection to a TV with a Euro AV Socket (with Normal Video or S-Video Input).
- If the TV is equipped with an antenna socket only, playback is performed via the connected aerial cable.
  Playback of stereo and bilingual programmes, however, is possible only when connection is made to the EURO AV socket or the AUDIO OUT sockets.

Connect the VTR



1. **Connection to the Antenna System**
   Unplug the antenna plug from the antenna jack of your TV and plug it into the RF IN Socket on the VTR.

2. **Connection between VTR and TV with the Aerial Cable**
   Connect the RF OUT Socket on the VTR with the antenna jack on the TV using the supplied aerial cable.

3. **If the TV has a Euro AV or a 4-pin S-Video Socket**
   - **TV with a Euro AV Socket**
     Additionally connect the EURO AV/AV1 of the VTR to the Euro AV Socket of the TV by using a Euro AV cable (optional accessory).
     If the TV has a Euro AV Socket with an S-Video Input, refer to the paragraph "Euro AV Socket with an S-Video Input" on the next page.
   - **TV with a 4-pin S-Video Socket**
     Additionally connect the S-VIDEO OUT Socket of the VTR to the S-VIDEO IN Socket by using the supplied S-Video cable.
     Also, connect the AUDIO OUT Socket of the VTR to the AUDIO IN Socket by using the supplied audio cable.

4. **Connection to the Mains (220–240 V~)**
   Connect the mains cable to the mains cable socket on the VTR and then to an AC mains outlet.
   Attention
   This VTR may only be operated with the supplied mains cable or its original Blaupunkt replacement part.

Please read the notes on the next page!

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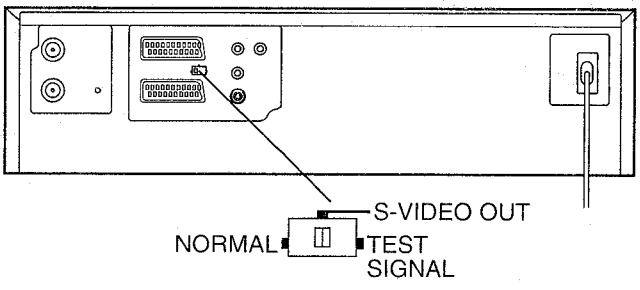
Getting started

Euro-AV Socket with an S-Video Input

Note the following when connecting a TV to this socket.

- The Euro AV cable must be suitable for "S-Video."
- Set the NORMAL/S-VIDEO OUT/TEST SIGNAL Switch to the "S-VIDEO OUT" position.



Notes

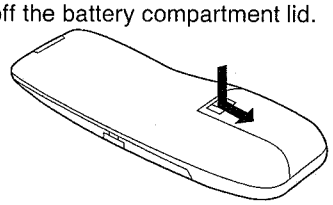
- If the TV is not connected to a Euro AV cable or to an S-Video cable, first read the section **"Setting the TV to the Video Playback Channel"** on page 99 and then read page 61.
- When connecting a TV to the Euro AV Socket (without S-Video Input), set the NORMAL/S-VIDEO OUT/TEST SIGNAL Switch to the "NORMAL" position.
- The TV can also be connected to the VIDEO/AUDIO OUT Sockets of the VTR.
- For different types of connections and their operation with a second VTR (Camera Recorder), see page 77.
  For decoder connections, see page 75.

Inserting the Batteries into the Remote Controller

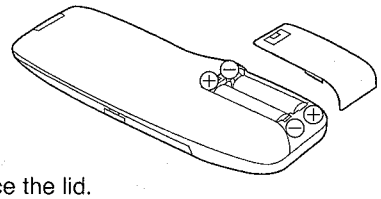
The Remote Controller is powered by 2 micro batteries (UM3/"AA"/IEC R6).

Loading the Batteries

❶ Take off the battery compartment lid.



❷ Insert the batteries, aligning their polarities as indicated inside the battery compartment.



❸ Replace the lid.

Attention

- Load new batteries with their polarities aligned correctly.
- When the operating range of the Remote Controller becomes smaller, the batteries must be replaced immediately.

Protect the Environment!
Do not discard used batteries with your household rubbish!

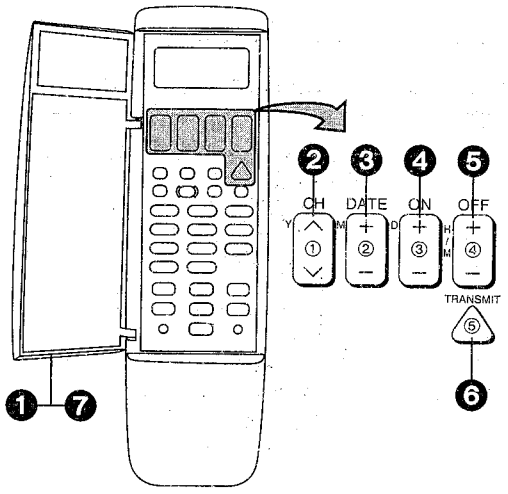
Please return them to your dealer or to a collecting dump for special waste materials.

Getting started

Setting the Date and Time

The time indication flashes when the VTR is connected to the mains for the first time and after a longer power failure. Date and time must be set correctly before the VTR can be used for unattended timer recordings.
By setting the time on the remote controller's clock and then by transmitting this setting to the VTR, the clocks on both the remote controller and VTR display the same time. The built-in digital clock employs the 24-hour system.

- The procedure for setting the date and time using the buttons on the VTR is described on page 96.



Preparation
Turn on the VTR with the VTR Button.

❶ Open the door of the remote controller in order to start the setting.
- When the date and time are already displayed while the door is **closed**, press and hold CLOCK/PRESET button for approx. 2 seconds.

❷ Press the Y (CH) ∧/∨ Button to set the **Year**.

❸ Press the M (DATE) +/– Button to set the **Month**.

❹ Press the D (ON) +/– Button to set the **Day**.

❺ Press the H/M (OFF) +/– Button to set the **Time**.
- When the button is kept pressed, the time indication changes in 30-minute steps.

❻ Press the TRANSMIT Button to transmit the clock setting to the VTR.

❼ Close the door of the remote controller to finish setting.

Note:
To change the previous clock setting, press the CLOCK/PRESET Button for at least 2 seconds. When the time is displayed, repeat steps ❷ to ❼.

Notes:
- The clock is programmed with a calendar, so it "knows" exactly what day of the week it is on any given date.
- The present time and the day of week are displayed continuously even if the VTR is turned off.
- The date and time are always shown in the display of the Remote Controller.

Power Back-up System:
In case of a power failure, the back-up system retains the present time memory for about 60 minutes. However, it takes more than an hour after the VTR has been connected to the mains for the back-up circuit to become operational.

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Getting started

Presetting TV Stations in the VTR's Tuner

To enable the VTR to receive and record TV broadcasts, the desired TV stations must first be stored in the VTR's built-in tuner.

A total of 99 (1...99) programme positions (channels) are available for storing TV stations.

When setting and storing TV stations, select channels which correspond to the channel numbers used by your TV [e.g. ARD on programme position (channel) 1]. This will avoid confusion.

There are two ways to preset the TV stations:

1. By **directly inputting the channels**, if you know the channels on which the TV programmes in your reception area can be received.
   Your dealer or the Post Office can provide this information.
   For each channel (TV station), input the channel number.
   The corresponding channel number is listed in the table **"Broadcasting Channel/Channel Number Input"**.
   (See below.)
2. By **using the automatic channel search**, if you do not know the channels.

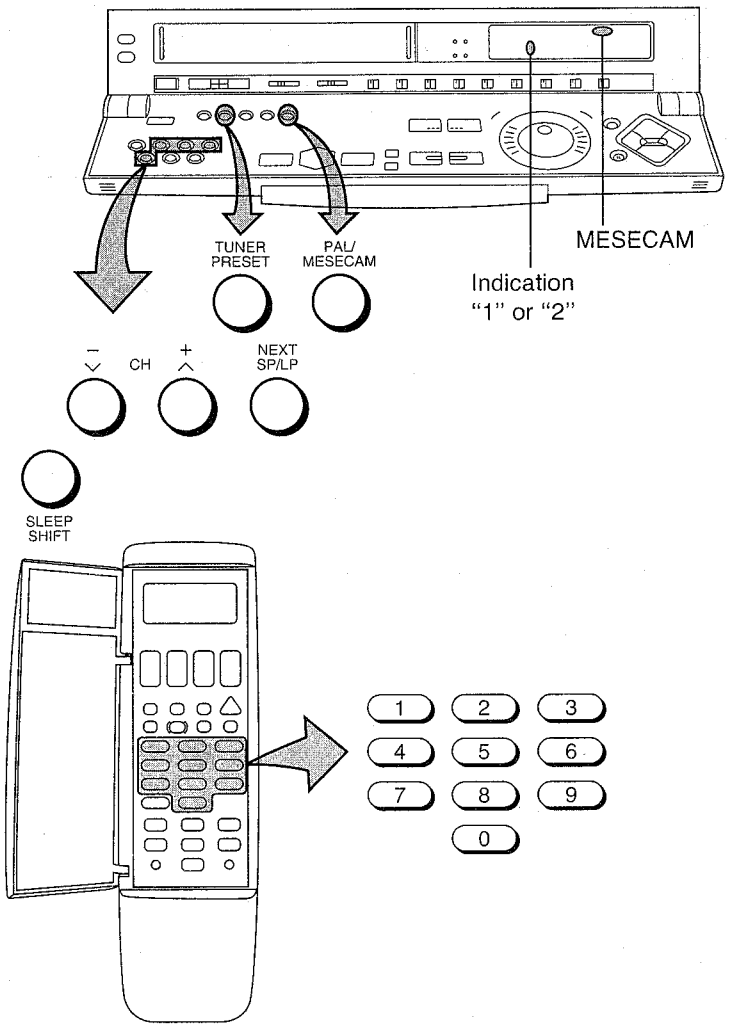
Broadcasting Channel/Channel Number Input Table

TV Channel	Channel Number Input
2–12	2–12
A–H*	13–20
21–69	21–69
——	74–76
——	80–82
S4–S10	83–89
S11–S20	90–99
S21–S41**	121–141

*In Italy: H1...(11), H2...(12), 13–20...(A–H)
**Only for 8 MHz channel raster

Examples for selecting the channel number

- For TV channel "4" select channel number "4".
- For TV channel "S6" select channel number "85".



Preparation

- Turn on the VTR with the VTR Button.
- Turn on the TV and select the programme position (AV) for video playback.
  Make sure that video playback is performed using an S-Video cable, Euro-AV cable or an aerial cable.
  (For further information, see the operating instructions of your TV.)

❶ To begin tuning, keep the TUNER PRESET Button depressed until a beep tone is heard.
- The programme position (channel) indicator flashes.

❷ Press the – or + Button to select the programme position (channel) on which the TV station is to be received.

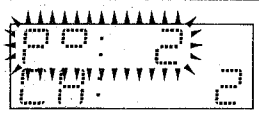
❸ Press the NEXT Button.

❹ If you want to set a normal TV programme (e.g. ARD, ZDF), the "1" indicator must be lit on the Display of the VTR besides the programme position (channel) indicator.
If the "2" indicator is lit, select the "1" indicator with the SHIFT Button.
If you want to set a coded TV programme (e.g. Premiere Teleclub), the "2" indicator must be lit. If the "1" indicator is lit, select the "2" indicator with the SHIFT Button.

❺ If you know the channels, select the direct channel input method.
If you do not know the channels, select the automatic channel search.

Direct Channel Input
Open the door of the Remote Controller.
Input the channel number corresponding to the desired TV station (channel) with the numerical buttons of the Remote Controller (for example, channel number 83 for channel S4; refer to the table **"Broadcasting Channel/Channel Number Input"** on page 62).

Automatic Channel Search
Press the + or – Button to search the desired TV programme.



During the channel search, the position indicator flashes.

- The VTR searches all channel numbers for TV programmes. It stops if it finds a TV programme and stores it in the selected programme position (channel).
- Press the + or – Button again to see another TV programme on this programme position.

❻ When receiving a TV programme in the **"PAL B/G"** colour system (e.g. TV stations in Germany), the "MESECAM" indicator must not be lit. If it is, turn it off with the PAL/MESECAM Button.
- When receiving a TV programme in the **"Secam B/G"** colour system, this indicator must be lit. Press the PAL/MESECAM Button to turn on the indicator.

To set further TV programmes (stations), press the NEXT Button and repeat operation steps ❷–❻ for each programme position (channel).

❼ Press the TUNER PRESET Button twice.

Fine Tuning, if necessary

Normally, the TV stations are optimally tuned in by the auto tuning system.
In poor reception areas, it may be possible to improve the picture quality by manually adjusting the tuning.

1. Keep the TUNER PRESET Button depressed until a beep tone is heard, then press the button again.
2. Press the NEXT Button.
3. Press the + or – Button to correct the tuning.
   - To return the tuning to its former state, press the SHIFT Button.
4. Press the TUNER PRESET Button.

Blanking of Unoccupied Programme Positions

You can blank programme positions that are not occupied with TV stations. They are then skipped during selection of the programme positions and allow faster programme selection with the ∨ and ∧ Buttons.

① Keep the TUNER PRESET Button depressed until a beep tone is heard.

② Press the + or – Button to select the programme position that is not to be occupied with a TV station.

③ Press the SHIFT Button.
"– –" appears on the Programme Position Display.
- Repeat operation steps ② and ③ for all programme positions which are not occupied by a TV programme (station). Afterwards, these programme positions (channels) can no longer be called up.

④ Press the TUNER PRESET Button twice.

Cancelling the Blanked Programme Position

❶ Keep the TUNER PRESET Button depressed until a beep tone is heard.

❷ Select the corresponding programme position on the VTR and then press the SHIFT Button.

❸ Press the TUNER PRESET Button twice.

ENGLISH

Getting started

Setting Up the Remote Controller for the ShowView System*

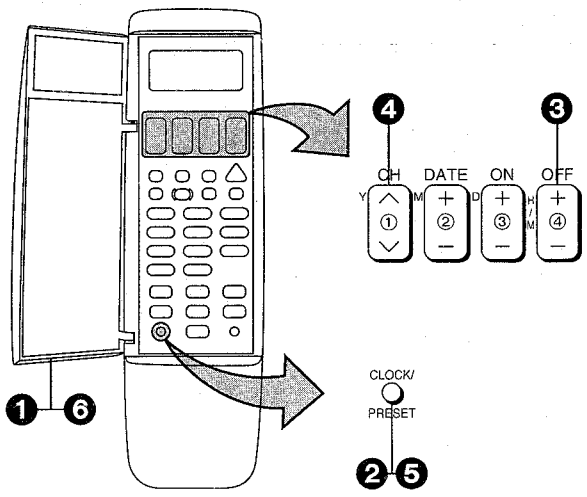
In the ShowView system each TV broadcast is designated by a numerical code (consisting of 3 to 9 digits).
Before you can programme a timer recording using the ShowView system, the Remote Controller must be set up once for each TV station as follows.
For each TV station you need to input the programme position on the VTR (see the setting procedure described on page 62) and the guide number (TV station ID number), so that the ShowView number can be automatically allocated to the correct programme position on the VTR.
The guide numbers (TV station ID numbers) of the different TV stations are listed in the programme schedule column carried by newspapers and magazines.
If the guide number of the desired TV station is not listed, refer to the section **"Setting Up by Using the ShowView Number"** on the next page.

Setting Example

TV Station	Programme Position	Guide Number (TV station ID number)
ARD	1	001
ZDF	2	002
SAT1	3	005
RTL PLUS	4	004

Note:
When a satellite receiver is connected to the VIDEO IN/AV3 socket or to the EURO AV socket (AV1/AV2), select programme position **"A3"**, **"A2"** or **"A1"**.
When the satellite receiver is connected by means of the aerial cable, select the programme position previously set for receiving satellite broadcasts on the VTR.

*ShowView is a trademark applied for by Gemstar Development Corp. ShowView system is manufactured under license from Gemstar Development Corporation.



Preparation
The current time must appear in the display of the Remote Controller. (See page 61.)

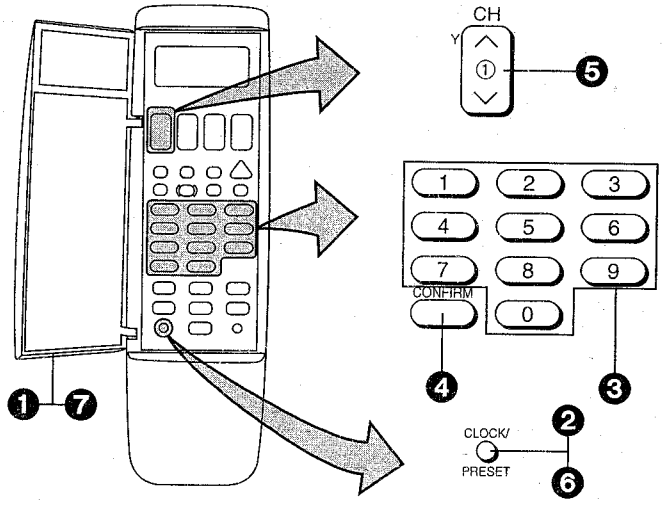
1. Open the door of the remote controller, in order to start the setting.
2. Press and hold CLOCK/PRESET button for approx. 2 seconds; press the button again as soon as the date and time are shown in the display.
3. Use the H/M (OFF) +/− Buttons to enter the guide number (TV station ID number) for the desired TV station (e.g. 001 for ARD).
4. Use the Y (CH) ∧/∨ Buttons to select the programme position of that TV station (e.g. 1 for ARD).
   • To set the other TV stations, repeat steps 3 to 4.
5. Press CLOCK/PRESET Button twice.
6. Close the door of the remote controller to finish the setting.

The settings for the ShowView system are stored in the Remote Controller. Always make sure that the batteries in the Remote Controller do not run down completely. When the operating range of the Remote Controller becomes smaller, the batteries must be replaced immediately.

Getting started

Setting Up by Using the ShowView Number

If you do not know the guide number of a TV station, you can figure it out from the ShowView number.
The ShowView number consists of a numerical code used to designate each TV broadcast in the programme schedule column carried by newspapers and magazines.



Preparation

The current time must appear in the display of the Remote Controller. (See page 61.)

1. Open the door of the remote controller.
2. Press and hold CLOCK/PRESET button for approx. 2 seconds; press the button again as soon as the date and time are shown in the display.
3. Use the numeric buttons to input the ShowView number for the programme broadcast by the desired TV station (e.g. the ARD Evening News).
   Make sure that the broadcast begins after the current time.
   - If you have entered the wrong number, press CANCEL Button and then enter the proper number.
4. Press CONFIRM Button to set the Guide Number.
5. Use the Y (CH) ∧/∨ Buttons to select the programme position for this TV station (e.g. 1 for ARD).
   - To set the other TV stations, repeat steps ❸ to ❺.
6. Press CLOCK/PRESET Button twice.
7. Close the door of the remote controller.

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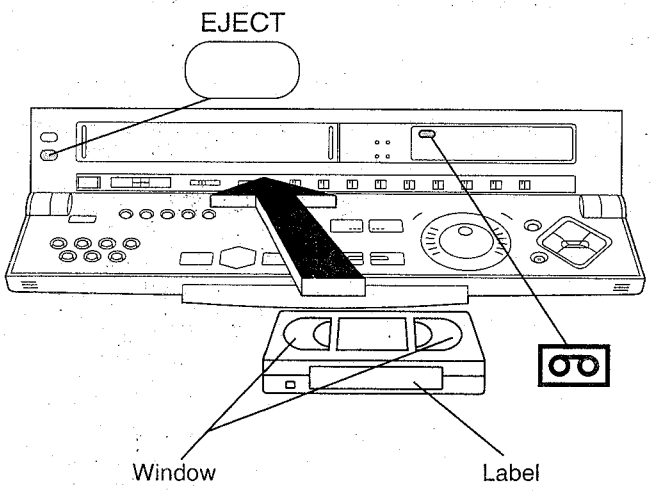
Basic functions

Playback of a Video Cassette

Only the basic playback functions are described on this page.
Additional playback functions are described on pages 71–73.
The operation can be done via the Remote Controller or with the same buttons on the VTR.
Some functions can be performed only with the Remote Controller.



Preparation

- Turn on the TV and select the AV programme position for video playback.
- Insert a video cassette as shown. The VTR turns on automatically and the cassette is drawn into the VTR. When a cassette is loaded, the indicator "📼" appears. When inserting a video cassette protected against erasure, playback starts automatically.

Removal of the Cassette

After playback is finished, press the EJECT button and remove the cassette.

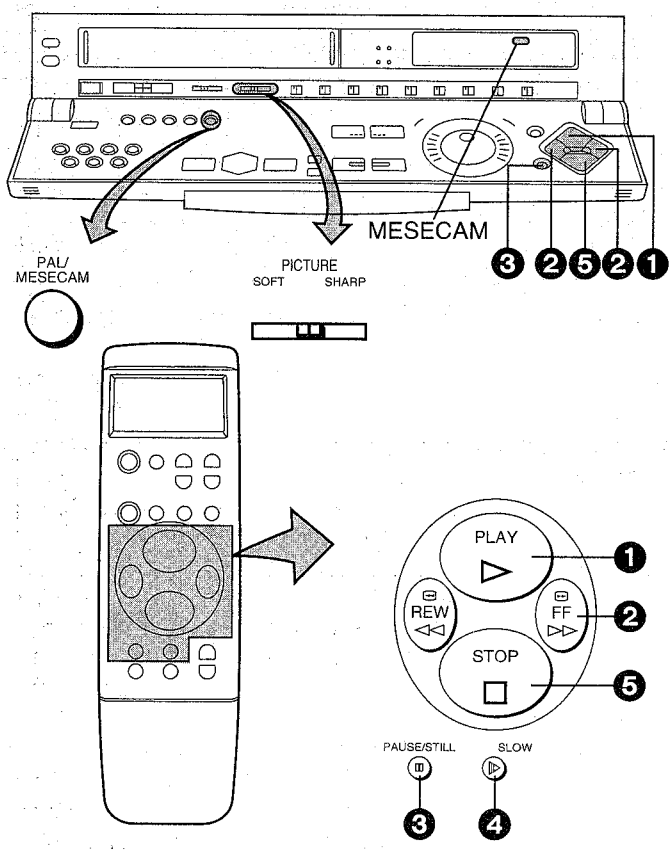
- Even if the VTR is turned off, it turns on automatically when the Eject Button is pressed; the cassette is ejected and then the VTR shuts itself off.

To select Colour System of Recorded Cassette

Note the colour system of the recorded cassette, otherwise playback is performed only in black-and-white.
Select the colour system with the PAL/MESECAM Button.

- When playing back a cassette recorded in the "PAL B/G" colour system, the indicator "MESECAM" must not be lit.
- When playing back a cassette recorded in the "Secam B/G" colour system, the indicator "MESECAM" must be lit.

Note:
Cassettes recorded in the French Secam system can only be played back in black-and-white.



To start Playback

❶ Press the ▶ Button.

- With the Picture Sharpness Control (PICTURE), the playback picture contour can be made sharper or softer.

Cue and Review Playback

❷ During playback, keep the ▶▶ or ◀◀ Button pressed to play back the tape at 11 times normal playback speed in forward or reverse direction.

- If you tap the ▶▶ or ◀◀ Button, Cue or Review playback remains activated. Press the ▶ Button to resume normal playback.

Still Playback

❸ During playback, press the ❚❚ Button to view a still picture.

- Press this button again to resume playback.

Slow Motion Playback

❹ During playback, press the ❚▶ Button to switch to slow motion playback.

- Press the ▶ Button to resume normal playback.

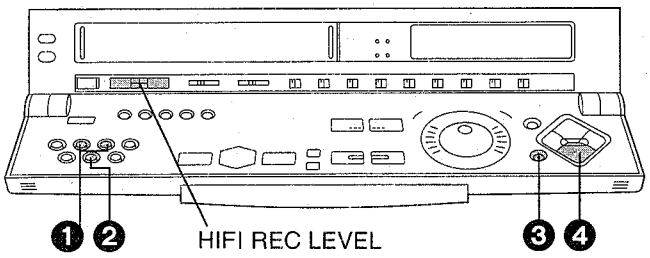
To stop Playback

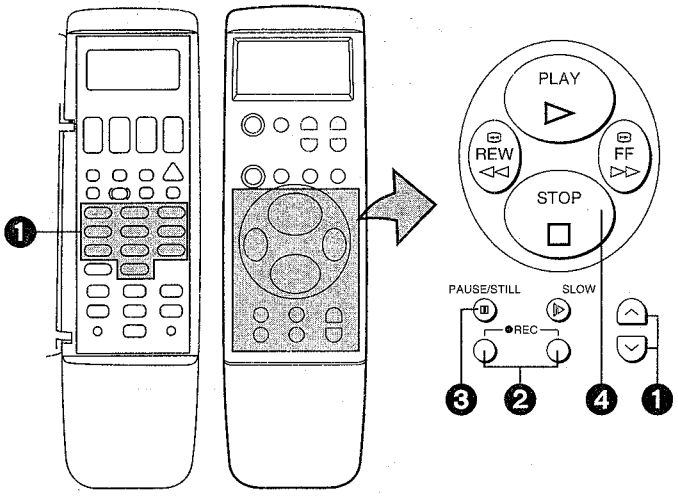
❺ Press the ■ Button to stop playback.

Basic functions

Recording a TV Broadcast

The operation can be done via the Remote Controller or with the same buttons on the VTR.





Preparation

- Turn on the VTR.
- Set the HIFI REC LEVEL Control in the middle position (click stop).
- Check to make sure that the VIDEO MODE switch is set to the position "AUTO" or "COLOUR".
- Insert a blank cassette.
- Turn on the TV and select the AV programme position for video playback.

Selection of TV Programme

You can select the TV programmes stored in the programme positions of the VTR with the ∨/∧ Buttons on the VTR or the Remote Controller, or the numeric button (0–9) on the Remote Controller.

- **Selection of Programme Positions 1–9 with Remote Controller**
  Press the corresponding numeric buttons on the Remote Controller and 2 seconds later, the selected TV programme appears.
- **Selection of Programme Positions 10–99 with Remote Controller**
  Press the corresponding numeric buttons within 2 seconds.

To start the Recording

1. On the VTR, select a TV programme to be recorded and check proper reception on the TV.
2. Press both REC Buttons on the Remote Controller simultaneously or the REC Button on the VTR.
   - The indicator "REC" appears and recording starts.

To Interrupt Recording

3. Press the ❚❚ Button to interrupt recording temporarily (Recording pause).
   - Press this button again to continue recording.

To Finish Recording

4. Press the ■ Button to stop recording.

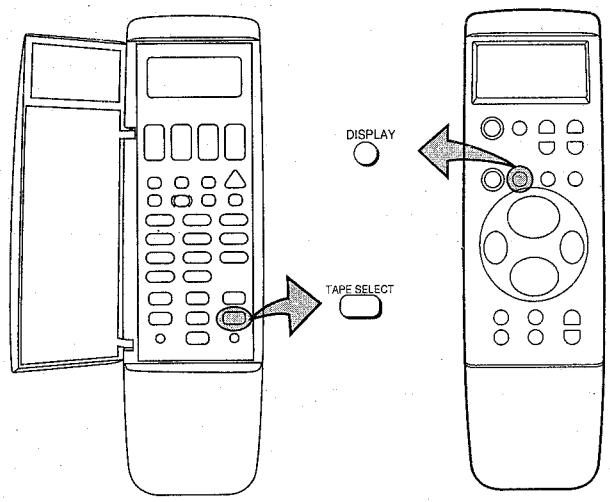
- When inserting a cassette protected against erasure, the indicator "📼" blinks, and an alarm sounds indicating that recording is not possible. (See page 74.)
- When recording, the TV does not have to be on. However, it can be used to watch the same broadcast or any other programme at the same time. (Select the desired TV programme on the TV.)
- Do not keep the "Recording pause" function turned on for longer than 5 minutes since the VTR will automatically switch to the stop mode after the period of time.
- At the beginning of a recording, an index signal is automatically recorded. The "WRITE" indicator momentarily appears on the Display. (See page 76.)
- See the notes for manual adjustment of audio recording level on page 100.

Other options for recording are described on page 74.

ENGLISH

Basic functions

Indication of Tape Running Time

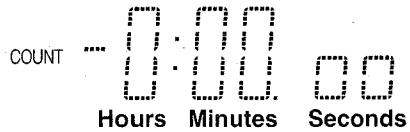


If the DISPLAY Button on the Remote Controller is pressed, the indicator on the Display of the VTR can be changed in the following direction.

→Clock Time→Tape Running Time→Remaining Tape Time→

Tape Running Time Indicator

It precisely shows the elapsed recording or playback time.

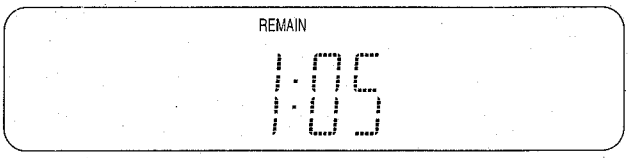


The "–" indicator appears when the tape rewinds further than the indication "0:00.00".

- If the indicator suddenly stops during Fast Forward or Rewind, this means that nothing is recorded on that tape segment.
- The tape running time is automatically reset to "0:00.00" when a cassette is inserted.
- The tape running time is not indicated correctly during playback of an NTSC recording.

Remaining Tape Time Indicator

The remaining tape time is displayed in hours and minutes.



- If DISPLAY button is tapped after starting the recording or playback, the remaining tape time is indicated only after a few seconds.

For the correct indication of the "remaining tape time", it is necessary to set according to the cassette type.
Select the indication with the TAPE SELECT Button on the Remote Controller:

- "E260" for cassettes with 260 minutes recording/playback time.
- "E240" for cassettes with 240 minutes recording/playback time.
- "E195" for cassettes with shorter recording/playback time.

Tape Running Display

Review playback	
Reverse playback	
Reverse slow playback	
Still playback	
Slow playback	
Normal playback	
Cue playback	
Recording	REC
Recording pause	REC

Automatic Operation

Auto Rewind

If the tape reaches its end during recording or playback, the VTR automatically rewinds the tape to the beginning (except for timer recording).

Basic functions

Programming a Timer Recording

You can programme the VTR so that it records up to 8 TV programmes within one month in your absence.
Each programmed timer recording is allocated to a timer position from 1 to 8.

Notes for programming

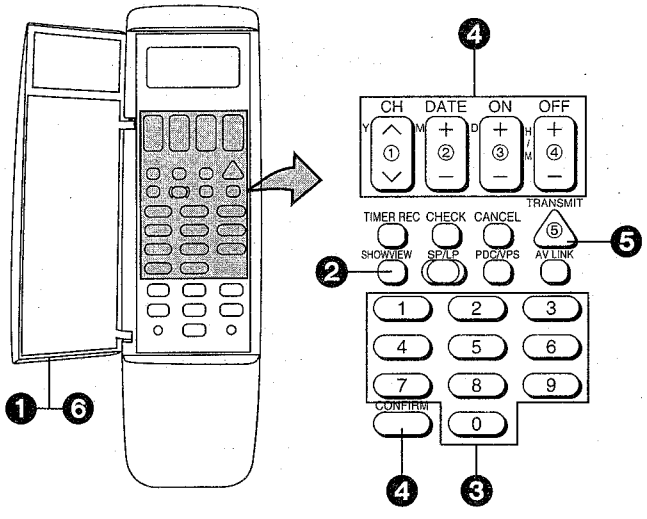
Set the EDITING CONTROL Switch on the VTR to the "RECORDER" or "PLAYER" position.
When programming, the VPS function is automatically turned on (the indicator "PDC/VPS" lights up) to control the turning on and off time of timer recording by the VPS signal of the TV stations.
If the TV station does not transmit any VPS signal, the timer recording is performed at the programmed time.
When programming, be careful not to overlap timer recordings. The first timer recording has priority and is performed to its end.
You can perform programming in the following methods:

- "***With***" the ShowView number.
- "***Without***" the ShowView number using the buttons of the Remote Controller (see page 70).
- "***Without***" the ShowView number using the buttons on the VTR (see page 97).

Programming "*with*" the ShowView number is the simplest method to programme a timer recording.

Programming "*with*" the ShowView number

You simply enter the ShowView number for the desired TV broadcast indicated in the programme schedule column carried by newspapers and magazines.
After entering the ShowView number into the Remote Controller, press TRANSMIT Button. The code is then converted automatically into the actual programming data and transmitted to the VTR.
If an additional "VPS" number is listed, input this number instead of the normal ShowView number.



Preparation

- Insert a cassette tape with an intact erasure prevention tab.
- The Remote Controller must be set up for the ShowView system. (See page 64.)

1. Open the door of the remote controller.
2. Press SHOWVIEW Button.
3. Enter a ShowView number.
4. Press CONFIRM Button to check the data.
   - You can use the ON (D) +/– button to change the starting time and the OFF (H/M) +/– button to change the ending time.
     Such a change should only be made when the VPS function is turned off with the PDC/VPS Button.
5. Press TRANSMIT Button to transmit the programming data to the VTR.
   - The TIMER PROGRAMME table with the programmed data appears on the screen.
6. Close the door of the remote controller.

Notes:

- To select the desired tape speed, press SP/LP Button in any of steps 3–4.
- When the ShowView number is used for programming, the recording time may be slightly longer than the actual programme time.
- Repeat steps 2 to 4 if "Err" appears on the remote controller.
- When programming two or more programmes, repeat steps 2 to 5 after pressing TRANSMIT Button.

Checking a Timer Programme

The VTR must be turned on, or the timer recording indicator "⏲" is lit.

Press CHECK Button repeatedly until the desired timer programme number (1–8) is displayed.

Cancelling a Timer Programme

1. Press CHECK Button repeatedly until the desired timer programme number (1–8) is displayed.
2. Press CANCEL Button.

Turning the Timer On and Off

After programming a timer recording, the Timer Recording Indicator ⏲ is lit and the VTR can no longer be used for recording and playback. To use the VTR, turn off the Timer Recording Indicator with the TIMER REC Button. To reactivate the timer, press this button again.

Attention

Switch off the Timer Recording Indicator "⏲" after timer recording is finished or to interrupt it, otherwise the VTR cannot be operated.

ENGLISH

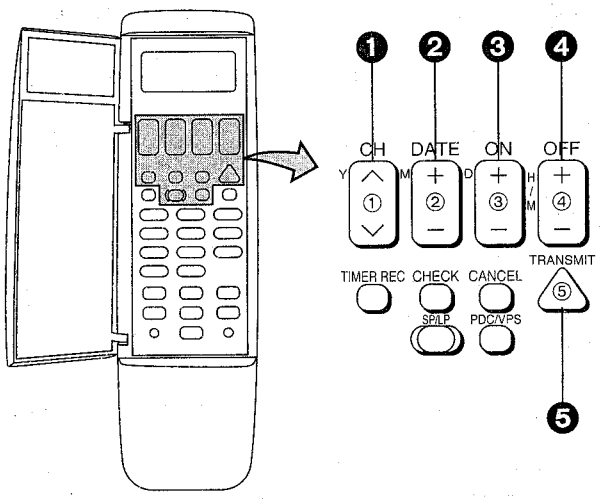
Basic functions

Turning the VPS Function On and Off

It is possible that the timer recording function will not operate, though the TV station transmits a VPS signal.
For these TV stations, you must turn off the PDC/VPS indicator on the Remote Controller by pressing the PDC/VPS Button before transmitting the data to the VTR. To reactivate the VPS function, press the PDC/VPS Button again.

Programming of a timer recording using the buttons of the Remote Controller ("*without*" ShowView)

When programming, you must enter the starting time up to the minute according to the TV schedule. If an additional "VPS" time is appointed, enter it instead of the normal starting time.



Preparation

- Make sure that the clock shows the exact present time.
- Insert a blank cassette.
- Open the door of the remote controller.

❶ Use the Y (CH) ∧/∨ Button to select the **programme position** for the TV station broadcasting the desired programme.

❷ Press the M (DATE) +/– Button to set **Date** of timer recording.
- Input the starting date.

❸ Press the D (ON) +/– Button to **Starting time**.
- When the button is kept pressed, the indication changes in 30-minute steps.

❹ Use the H/M (OFF) +/– Button to set the **ending time**.
- When the button is kept depressed, the time indication changes in 30-minute steps.

❺ Press the TRANSMIT Button to transmit the programming data to the VTR.

❻ Close the door of the remote controller.

Selecting the Desired Tape Speed

Press SP/LP Button in any of step ❷–❹.

Timer Recording Every Day at the Same Time (Everyday)

For this timer function, several groups of days can be selected.

Ⓐ Daily recording from Monday to Friday

Ⓑ Daily recording from Monday to Saturday

Ⓒ Daily recording from Sunday to Saturday

In step ❷ select the desired days by repeatedly pressing DATE – Button.

Ⓐ	MO TU WE TH FR
Ⓑ	MO TU WE TH FR SA
Ⓒ	SU MO TU WE TH FR SA

Timer Recording on the Same Day Every Week at the Same Time (Everyweek)

In step ❷ select the desired day by repeatedly pressing DATE – Button.

Timer Recording from External Picture/ Sound Source

If Timer Recording is performed by a unit connected to the EURO AV Socket or to the S-VIDEO IN/VIDEO IN/AUDIO IN Sockets (e.g. satellite receiver), select the A1, A2 or A3 indicator in step ❶ for the programme position.

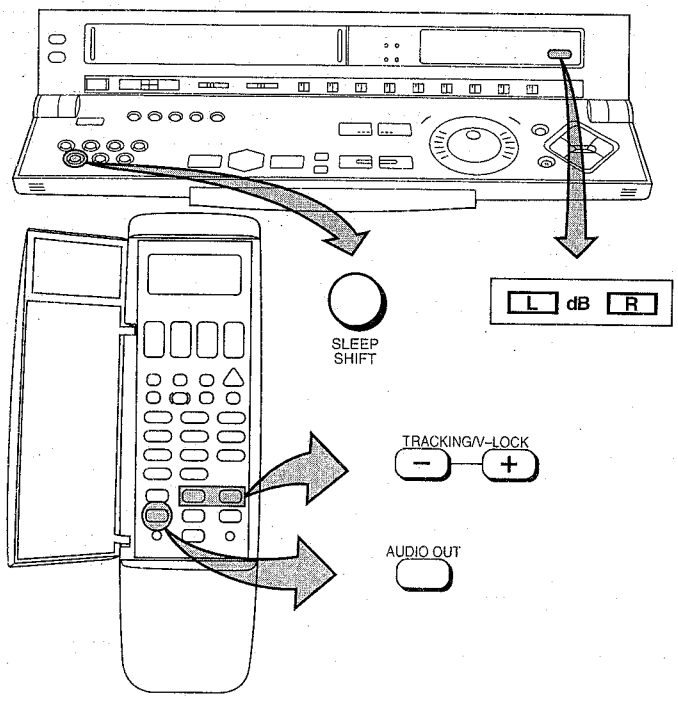
A1: Through the EURO AV Socket (AV1).

A2: Through the EURO AV Socket (AV2).

A3: Through the S-VIDEO/VIDEO/AUDIO IN Sockets.
Set the INPUT SELECT FRONT Switch on the VTR to the appropriate position.
- S-VIDEO: For recording through the S-VIDEO IN and AUDIO IN Sockets.
- LINE: For recording through the VIDEO IN and AUDIO IN Sockets.

Please refer to the following sections on pages 69–70:
- Checking a Timer Programme
- Cancelling a Timer Programme
- Turning the Timer On and Off
- Turning the VPS Function On and Off

Advanced functions



Selection of Audio Playback Mode

During playback of stereo or bilingual recording, the audio playback mode can be selected with the AUDIO OUT Button on the Remote Controller.

Each time this button is pressed, the audio playback mode changes as follows:

Stereo (Hi-Fi audio track)→Left channel→Right channel→Mono (normal audio track)→

and the audio track indicators L and R show the selected sound mode in the following way:

Stereo: (Hi-Fi audio track)	Indicators L and R are lit.
Left channel:	Indicator L is lit.
Right channel:	Indicator R is lit.
Mono: (normal audio track)	Indicators L and R are not lit.

Notes:

- Make sure that the HIFI/NORMAL MIX Selector is "OFF".
- For playback of cassettes recorded on a Hi-Fi VTR, always select the Hi-Fi audio track.
- In case of bilingual recording, channel 1 (main language) is played back on the left channel and channel 2 (sub language) on the right channel.
- Cassettes of which normal audio track was recorded with a bilingual recording cannot be played back.

NTSC System Playback

Cassettes recorded in the NTSC colour TV system can be played back on an ordinary PAL colour TV with this VTR.

- Depending on the TV, black bars may appear on the screen top and bottom. This is not an indication of malfunction.
- The playback picture may move up or down. If the TV is equipped with a picture hold control, this motion might be stopped.
- The playback special functions can be used for NTSC system playback with limitations.
- Possibly, only black-and-white picture is played back on a TV with 100 Hz frame frequency.
- When playing back a cassette recorded in the NTSC System with the "SLP" mode, the "LP" indicator appears on the display.

Eliminating Noise during Playback

Automatic Tracking Control (DIGITAL TRACKING)

When a cassette recorded on another VTR is played back, colour and noise bar distortions may occur. In most cases, the automatic tracking control eliminates these distortions.

If the playback picture still contains noise bars, it may be possible to eliminate them by pressing the TRACKING/V-LOCK Button "+" or "−".

- To return to the original condition, simultaneously press the TRACKING/V-LOCK buttons "+" and "−".

Still Picture Adjustment

If the picture jumps vertically during still playback, adjust with the TRACKING/V-LOCK Button "+" or "−".

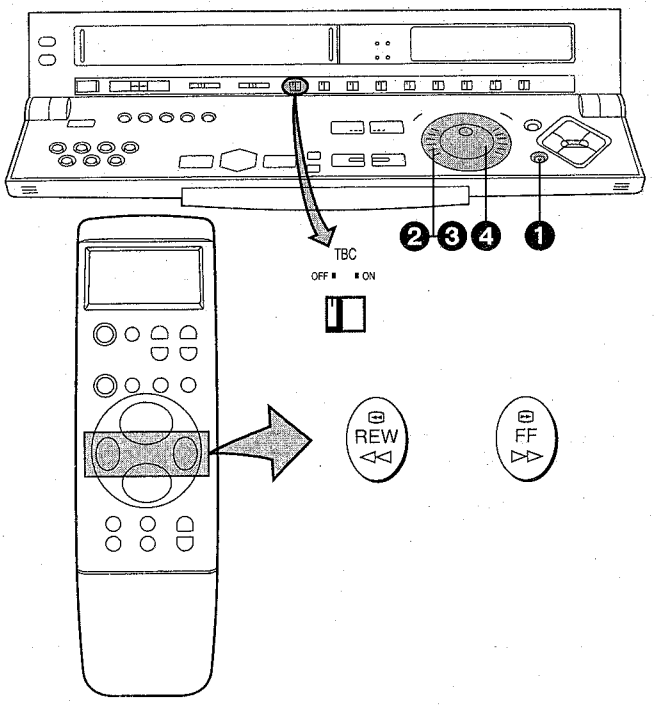
Sleep Function

The cassette is played back up to the preset time by the Sleep function. Then, the VTR turns itself off automatically.

- During playback press the SLEEP Button. The time indication "0:00" appears. Each time the SLEEP Button is pressed, the time indication changes in 30 minute-steps: up to 9 hours.
- To cancel the SLEEP function, reset the time display to "0:00" by repeatedly pressing the SLEEP Button.

ENGLISH

Advanced functions



Setting Playback Speed Using the Jog/ Shuttle Function

- With the Shuttle Ring, the playback speed can be adjusted step by step in both forward and reverse directions.
- With the Jog Dial, the desired picture can be exactly located.

1. Press the PAUSE/STILL Button on the VTR.
2. Use the Shuttle Ring to select the desired playback direction and speed.
   The farther you turn the Shuttle Ring to the left (counterclockwise) or to the right (clockwise) in the desired playback direction, the faster is the tape playback.
   There are several steps selectable between Still playback (click position) and Cue/Review playback.
3. Set the Shuttle Ring to its centre click position.
4. Turn the Jog Dial to the left (counterclockwise) or to the right (clockwise).
   - Every turn of approx. 30° advances or reverses the tape by one field. The playback speed corresponds to the number of dial rotations.

To switch to Normal Playback:
Press the PLAY or PAUSE/STILL Button on the VTR.

Fast Forward and Rewind

After pressing the ▶▶ or ◀◀ Button, the tape is fast-forwarded or rewound at high speed.
Press the ■ Button to stop Fast Forward and Rewind.

Fast Forward: Automatically rewinds the tape to the beginning when the tape ends.

Rewind: Automatically stops at the beginning of the tape.

Picture Search Playback during Fast Fowarding or Rewinding

During fast forwarding, keep the FF Button depressed.
During rewinding, keep the REW Button depressed.

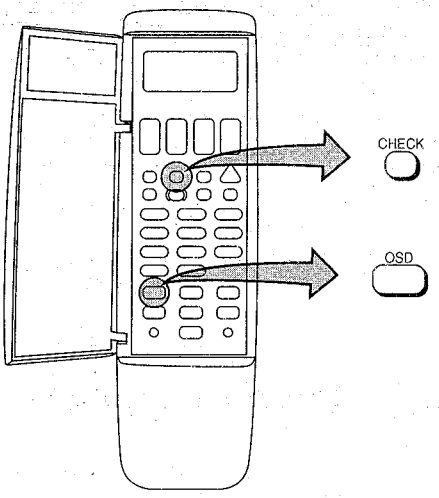
- When using the special playback functions, noise bars and distortion may appear in the playback picture, the color may flicker, or the picture may be reproduced in black and white. However, this is normal and does not indicate a malfunction.
- If Cue or Review playback continues for more than 10 minutes, the VTR automatically switches to normal playback.
- If Still playback continues for more than 5 minutes, the VTR switches to the stop mode.
- If Slow playback continues for more than 5 minutes, the VTR switches to the stop mode.
- Approx. 10 seconds after changing from Review playback to Still playback, the still picture reverses by a few fields.
- The number of possible playback speeds is different on tapes recorded in the LP mode.
- Dubbing of special function playbacks such as still picture, slow motion and Cue/Review playback cannot be made without disturbances.

TBC Function (Time Base Corrector)

When playing back a tape recorded on another VTR, the playback picture may shake vertically or be distorted. You can improve the picture quality by setting the TBC Switch to "ON".
Normally, this switch must be set to "OFF".

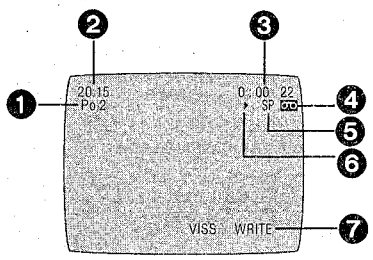
Advanced functions

On-Screen Displays (OSD Function)



Press the OSD button to display the On-Screen Menu and other superimposed data on the monitor screen.

- Press the OSD button again to cancel the on-screen display.



❶ Programme position
❷ Present time
❸ Tape counter
❹ Cassette-in indicator
❺ Tape speed indicator

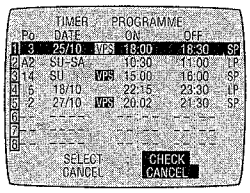
❻ Tape running display

Stop, Eject	■
Rewind, Review	◀◀
Fast Forward, Cue	▶▶
Playback	▶
Reverse Playback	◀
Still Playback	❚❚
Recording, Insert, Audio Dubbing	●
Recording Pause, Insert Pause, Audio Dubbing Pause	❚❚●
Slow Playback	❚▶
Reverse Slow Playback	◀❚

❼ Index signal writing or erasing indicator

Checking Timer Programming

Press the CHECK or the PROG/CHECK button.



The procedure for selecting the language for the on-screen display is described on page 78.

Note:

In the following cases the OSD function is not available:

- When the EDITING CONTROL switch is set to "PASSIVE".
- During playback of a cassette recorded in the NTSC colour TV system.

ENGLISH

Advanced functions

Recording Time of the Video Cassette

For every recording (including timer recordings) you can choose between normal type speed ("SP" indicator) and half speed ("LP" indicator).

- If the "LP" indicator appears, the cassette recording time is doubled.
  (For example, 480 minutes for "E 240" cassettes.)
- The correct tape speed is selected automatically for playback.
- Cassettes recorded in the "LP" mode can only be played back on the "LP" VTR.
- When a recording is made with the normal tape speed ("SP" indicator), the picture quality is improved.

Before starting the recording, select the desired tape speed with the SP/LP button on the VTR or Remote Controller.

Recording of Stereo and Bilingual Sound

For recording of stereo and bilingual sound, no special operation is required.
In case of bilingual sound, two different sound tracks are broadcast, e.g. two language versions of a movie.

- When recording a stereo broadcast, the indicator "STEREO" lights up.
- When recording a bilingual broadcast, the indicator "BILINGUAL" lights up.

The Recording System (VHS or S-VHS)

- S-VHS and VHS cassettes can be used for both recording and playback.
- An S-VHS cassette can be recorded in an S-VHS or VHS system.
- A VHS cassette will be automatically recorded in the VHS system.
- During playback, the correct system (S-VHS or VHS) will be automatically selected.
- S-VHS cassettes with S-VHS recordings cannot be played on a normal VHS VTR.

Select the system (S-VHS or VHS) for recording

Set the "S-VHS" Switch on the VTR to "ON" or "OFF."

ON: S-VHS cassettes are automatically recorded in the S-VHS system.
(The S-VHS indicator lights up.)
VHS cassettes are automatically recorded in the VHS system.

OFF: S-VHS cassettes are recorded in the VHS system.

- Colour TV programmes with the "Secam B/G" standard are always recorded in the VHS system.

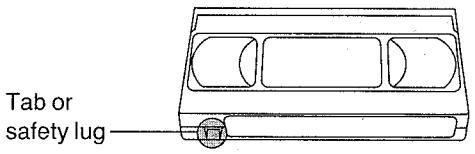
The Video Cassette

- Use only cassettes bearing the VHS or S-VHS mark.
- After recording or playback, always fully rewind the tape to its beginning.
- Protect cassettes from dust, moisture, sunshine and strong magnetic fields (for instance near loudspeakers or electric motors).
- Store cassettes at room temperature and in a vertical position.
- Never join broken videotape with adhesive tape. This may damage the video heads.

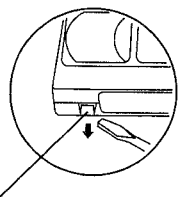
Erasure Protection

A recorded video cassette can be protected against accidental erasure by breaking off the cassette's tab or sliding the safety lug to the left.
Such a cassette can only be used for playback.
To record again on the cassette,

- cover the hole with adhesive tape or,
- slide the safety lug to the right again.

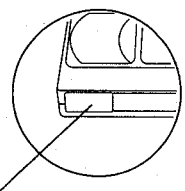


To prevent accidental erasure:



Break off the tab with a screwdriver.

To record again:



Cover the hole with adhesive tape.

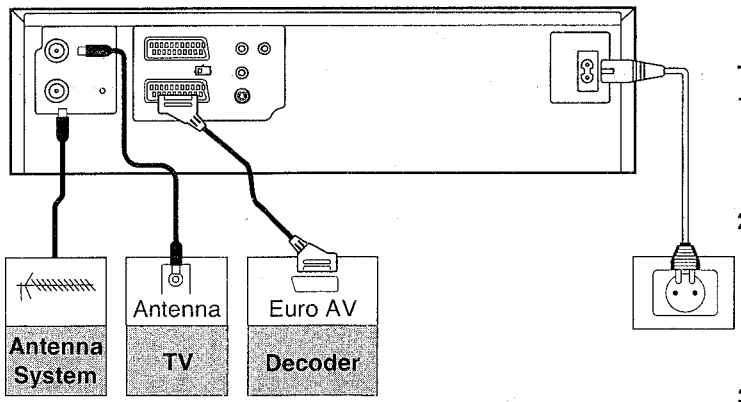
Slide the safety lug to the left.

Slide the safety lug to the right again.

Advanced functions

Receiving Coded TV Programmes

With cable (satellite) installations, occassionally encoded TV broadcasts can be input (e.g. Première Teleclub).
To receive and record these TV broadcasts, you need a decoder to be connected to the Euro AV Socket of the VTR. (Consult you dealer.)



❶ Connect the decoder to the Euro AV Socket of the VTR with a Euro AV cable.

❷ Turn on the TV and select the programme position (AV) for video playback.

❸ On the VTR, select the programme position (channel) on which the coded TV programme is stored.

Make sure that, for these TV programmes, the indicator "2" (for occassionally encoded TV programmes) has been selected. Otherwise, no reception is possible. (See page 62.)

The AV LINK Button

This button can be used for switching the connected TV from the VTR mode (the "VTR" indicator lights) to the TV mode (the "VTR" indicator does not light).

Requirements:

- VTR and TV are connected via an Euro AV cable.
- Each programme position for playback from external units (decoder or VTR with switching voltage at pin 8 of the EURO AV socket) can be selected on the TV.

This results in the following possibilities:

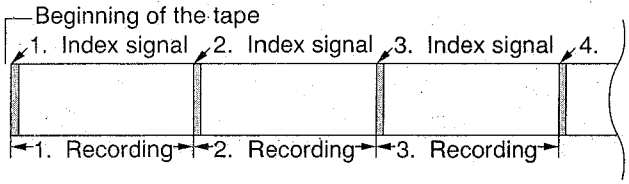
1. **Viewing and recording a coded TV programme.**
   - Press the AV LINK button to turn on the "VTR" indicator.
   - Select the coded TV Programme on the VTR.
2. **Viewing a normal TV programme while recording a coded TV programme.**
   - Press the AV LINK button to turn off the "VTR" indicator.
   - Select the coded TV Programme on the VTR.
   - Select the normal TV programme on the TV.
3. **Viewing a coded TV programme while recording a normal TV programme.**
   - Press the AV LINK button to turn off the "VTR" indicator.
   - Select the normal TV Programme on the VTR.
   - Select the coded TV programme on the TV.

ENGLISH

Advanced functions

Index Search

The Index Search function allows you to quickly locate recordings marked with index signals at the beginning of the recording.



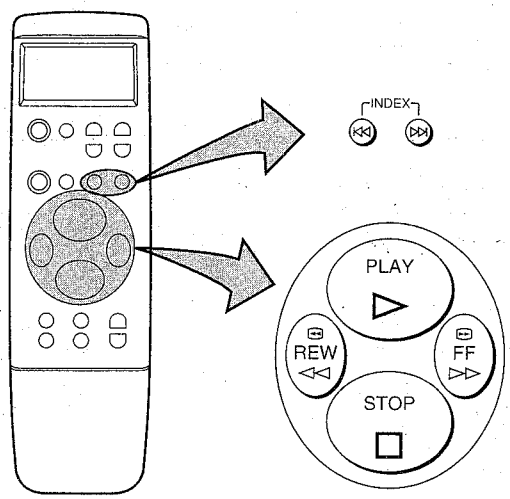
Recording Index Signals

Index signals are recorded in following cases.
WRITE indicator appears on the Display.

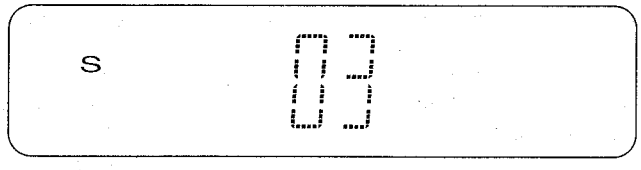
- When a recording is started by pressing the REC Button.
- When the REC Button is pressed during recording.
- When timer recording is activated.
- When the WRITE Button is pressed during playback.

Start the Index Search

To access a recording quickly from any tape position, it is recommended to write down the order of recordings.
It is possible to skip up to 20 index signals in forward and reverse direction to access the desired recording quickly.



Press the INDEX ▶▶I (forward) or INDEX I◀◀ (backward) Button several times to input the number of the index signals that you want to skip.



- Index Search starts in forward or reverse direction.
- Press the ▶ or ■ Button to interrupt Index Search.
- Every time an index signal is skipped, the number on the Display decreases by one.
- When the input index signal is reached, normal playback starts.

Erasing Index Signals

1. Press the INDEX ▶▶I or I◀◀ Button to locate the index signal to be erased.
   - Be sure not to omit this step. Otherwise, this function may not work correctly.
2. Press the PAUSE/STILL Button as soon as playback begins.
3. Press the ERASE Button.
   - An Index signal can be erased only if the the ERASE Button is pressed during playback within 5 seconds after the index signal has been passed on the tape.

- If the Search function is started extremely close to the beginning of the next recording (where an index signal is set) or from the beginning of the tape, the first index signal may not be counted.
- When using cassettes that contain long blank portions or which have been erased and re-recorded several times, the Search function may not work correctly.
- The interval between two index signals should be at least 3 minutes.
- Index signals can not be recorded or erased on a video cassette with a broken off tab.

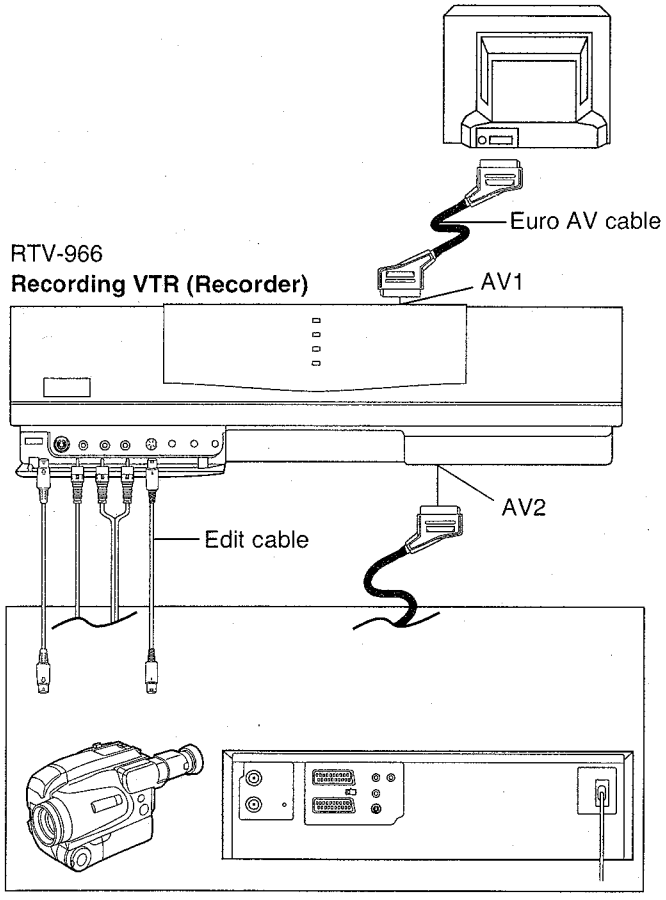
Editing functions

Preparation for Editing

This VTR is equipped with a built-in editing controller.
When connecting to a second VTR/camera recorder, the editing functions of the RTV-966 are controlled with a 5 (11)-pin EDIT control socket and real-time tape indicator.
Editing operation with a second VTR/camera recorder without a 5 (11)-pin EDIT control socket is described on page 93.
In the following description, the VTR being used to play is referred to as "Player" and the VTR being used to record is referred to as "Recorder".

Connection Example

For editing with the RTV-966 you can choose between the EURO-AV socket (AV2) and the S-VIDEO IN/VIDEO IN/AUDIO IN sockets (AV3).
For information about which sockets to select on the camera recorder or second VTR please refer to the operating instructions supplied with the external unit.
The connecting cable, between camera recorder/VTR and RTV-966, is available from your dealer.



1. Connect the EURO-AV socket (AV1) on the RTV-966 to the Euro AV socket on the TV.
2. Turn on the TV and select the programme position (AV) for video playback.
3. Connect the S-VIDEO OUT/VIDEO OUT/AUDIO OUT sockets or the EURO-AV socket on the second VTR/camera recorder (Player) to the S-VIDEO IN/VIDEO IN/AUDIO IN sockets (AV3) or the EURO-AV socket (AV2) on the RTV-966 (Recorder).
4. Use the ∧/∨ buttons to select one of the following programme positions on the RTV-966 (Recorder):
   A2: if connected to the EURO-AV socket (AV2).
   A3: Through the S-VIDEO/VIDEO/AUDIO IN sockets. Set the INPUT SELECT FRONT switch on the VTR to the appropriate position.
   S-VIDEO: For recording through the S-VIDEO IN and AUDIO IN sockets.
   LINE: For recording through the VIDEO IN and AUDIO IN sockets.
5. Connect the EDIT socket on the RTV-966 to the EDIT socket on the second VTR/camera recorder via the supplied edit cable.

Setting the "EDITING CONTROL" Switch

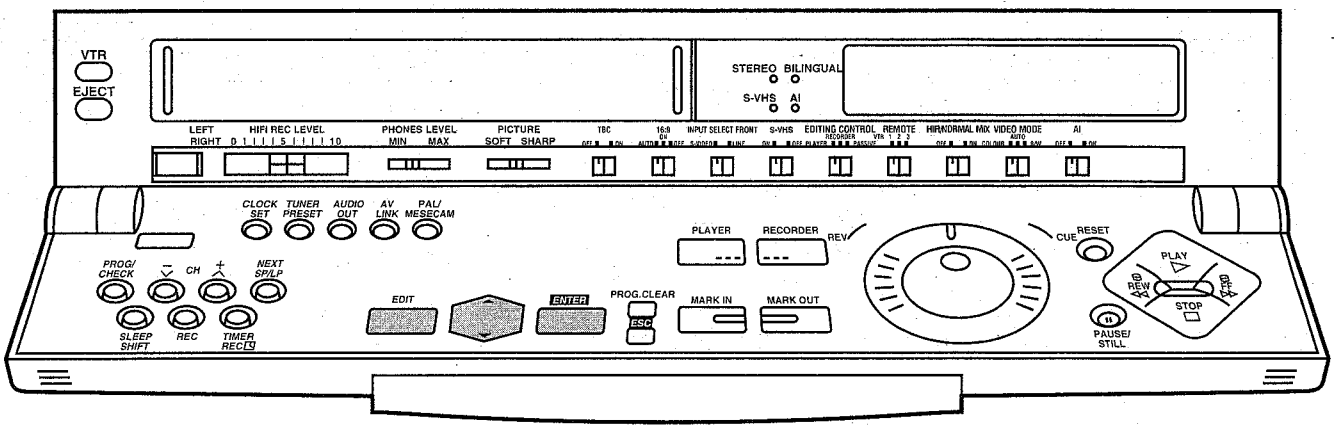
- When using two RTV-966s set the switch on the Player to "PASSIVE" and on the Recorder to "RECORDER". The editing operations are controlled by the Recorder.
- When using the RTV-966 as Recorder, set the switch to "RECORDER".
- When using the RTV-966 as Player, set the switch to "PLAYER". The Recording VTR must be connected to the EURO-AV (AV1) or S-VIDEO/VIDEO/AUDIO OUT Socket of the RTV-966.

Notes:

- Make sure to perform all operating steps required for editing on the RTV-966; the connected unit must not be operated.
- When using the RTV-966 as Player, it is possible that not all editing functions will operate correctly on the VTR used as Recorder, depending on the model.
- When a camera recorder is connected, it is not possible to control reverse playback and slow motion playback on the camera recorder from the RTV-966.
- When the EDITING CONTROL switch on the RTV-966 set to "PASSIVE", no operations are possible, and the OSD function is unavailable as well.
- When the mains cable of the RTV-966 is disconnected after the edit cable has been connected, wrong indications may be displayed on the connected unit.
- The supplied edit cable cannot be used to connect two other VTRs with edit sockets.
- The On Screen Display does not appear when no input signals are supplied from another unit or when a non-recorded cassette is played.

ENGLISH

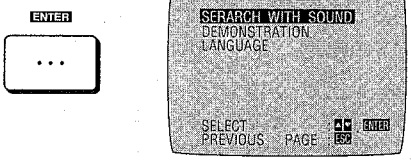
Editing functions



Basic Setting for Editing

1. Press the EDIT Button.
2. Select "SETTING" in the OSD menu.

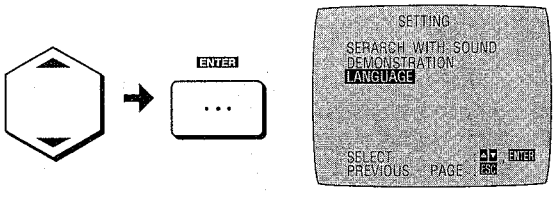
3. Press the ENTER Button.



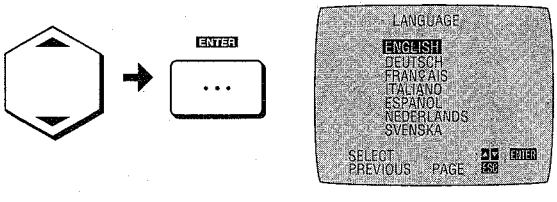
Select the language for on-screen display

Select one of the seven languages shown in the menu:

4. Select "LANGUAGE".

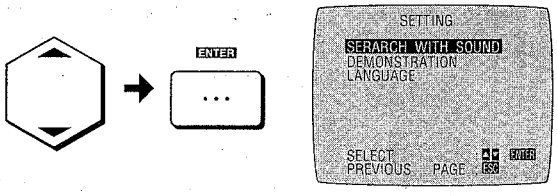


5. Select the desired language.

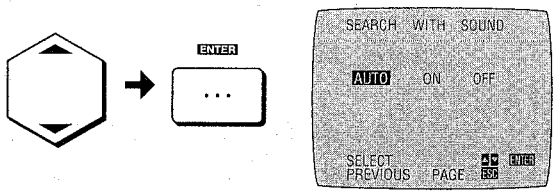


Selecting Sound during Search

4. Select "SEARCH WITH SOUND".



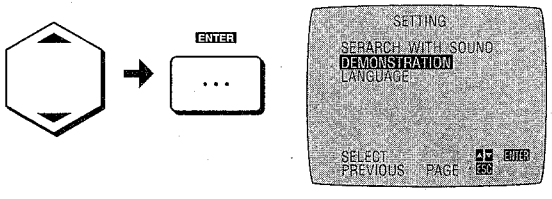
5. Select the desired setting.



AUTO: During search the sound is heard only while editing is in progress.
ON: The sound is always heard during search.
OFF: The sound is never heard during search.

Demonstration of On-Screen Information for the Various Editing Functions

4. Select "DEMONSTRATION".



- The on-screen data for each editing function are displayed successively in intervals of approx. 5 seconds. You can interrupt the demonstration at any time by pressing the EDIT or ESC Button.

Editing functions

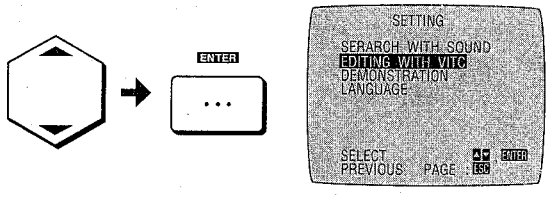
Editing with the Time code (VITC)

VITC (Vertical Interval Time Code) Function

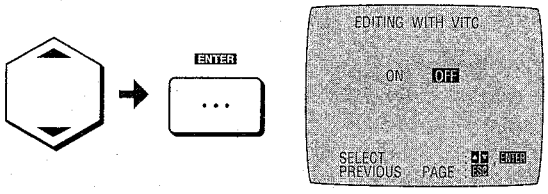
Since one address number (definite number) is assigned to each frame, each desired frame on the tape can be searched for specifically while the address is checked during playback.
This address is recorded as a time code number.
Since VITC signals are generally recorded with video signals, they remain stored on the tape after the cassette is removed from the VTR or the unit is turned off. This enables you to check the exact position of a desired tape at any time.

- The VITC function is at your disposal if the VTR is additionally equipped with the VITC Adaptor (optional). Please contact your dealer for further information.

❹ Select "EDITING WITH VITC".



❺ Select the desired setting.



ON: To read the VITC signals during playing and to write during recording.
The time code is displayed in hours, minutes and seconds on the counter. During programme editing, the time code is displayed in hours, minutes, seconds and frames (25 frames per second) on the TV screen.
OFF: The normal counter indication appears.

Reading the VITC signal

After the cassette is loaded, "–:––.––" appears on the counter. When playback starts, the VITC signal is read and the time code is displayed.

- If no VITC signal is recorded onto the tape, the time code is not displayed.

Writing the VITC signal

After the cassette is loaded, "–:––.––" appears on the counter. When recording starts, the VITC signals are recorded from 0h00m00s00f.
When recording starts after the tape is played and the VITC signals are read, the VITC signals are recorded from the time code displayed on the counter.

Notes:

- To use the VITC function during Editing, first be sure to turn on the VITC function as mentioned above, and then start the editing operation after you have erased all last used editing programmes.
- With an inadequate tracking setting, the VITC signal cannot possible be read from the tape completely.
- The tape running time cannot be reset when the VITC function is activated.
- When the VITC function is activated, the RTV-966 can be set as Player.
  Set the EDITING CONTROL to the "PLAYER" position.
- If the VITC function is activated, it is possible to programme up to 50 scenes when programming Assemble Editing.

ENGLISH

Editing functions

Editing Modes

During manual and automatic editing with the RTV-966 you can select between 4 different modes. During automatic editing (programme editing) you can programme up to 10 scenes in each mode. Editing is then performed automatically.

Manual Editing
- Dubbing
- Insert editing
- AV insert editing
- Audio dubbing

Programme Editing
- Assemble editing
- Insert editing
- AV insert editing
- Audio dubbing

Dubbing

With this function the picture and sound signals of a recorded tape can be dubbed (copied) onto a second cassette.

Player

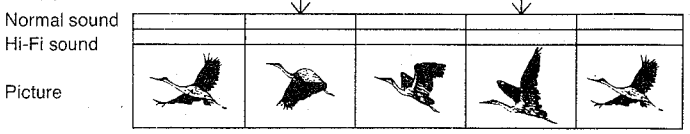
Recorder

Insert Editing

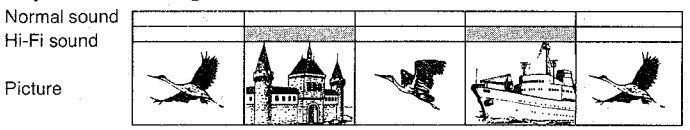
Using the insert editing function it is possible to replace the picture and Hi-Fi sound of a recorded cassette with scenes of identical duration. The original sound recorded on the normal audio track is maintained.

Player

Recorder



Tape after editing



- To listen to the original sound, press the AUDIO OUT button to select the normal audio track.
- To listen to the new sound, press the AUDIO OUT button to select the Hi-Fi audio tracks.

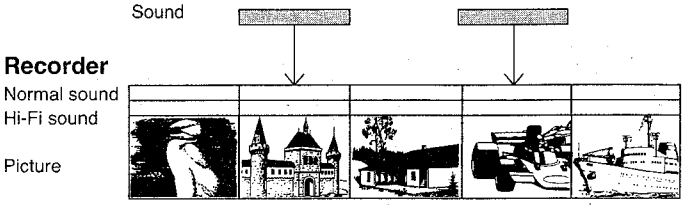
AV Insert Editing

AV insert editing basically corresponds to insert editing. In addition to the picture and Hi-Fi sound, however, the sound recorded on the normal audio track is replaced as well.

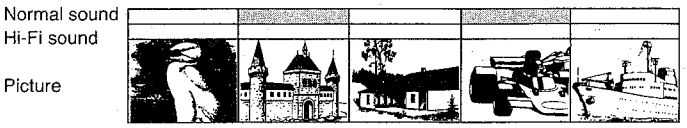
Audio Dubbing

The audio dubbing function is used to record a new sound track on an already recorded tape. The original sound recorded on the Hi-Fi audio tracks is maintained.

Player



Tape after editing



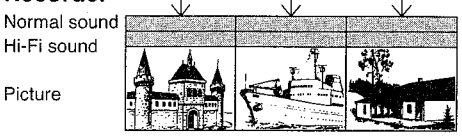
- To listen to the new sound, press the AUDIO OUT button to select the normal audio track.
- To listen to both the new and the original sound, set the Hi-Fi/NORMAL MIX switch to "ON".

Assemble Editing

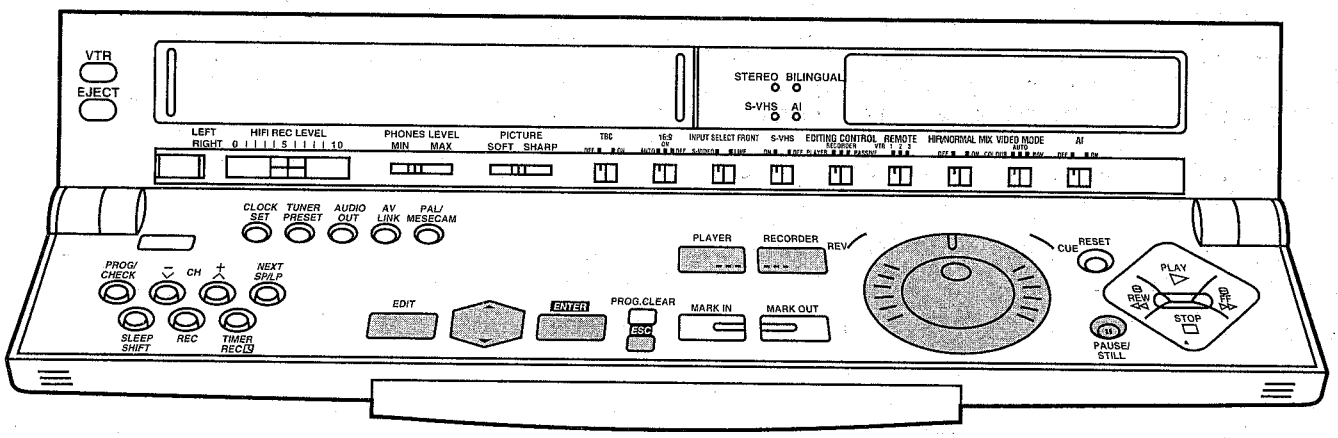
The assemble editing function is used to create a single recording out of several programme segments (picture and sound) from one or more recorded cassettes in any desired sequence on another tape.

Player

Recorder



Editing functions

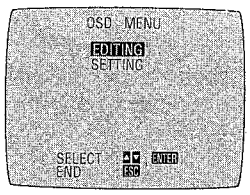
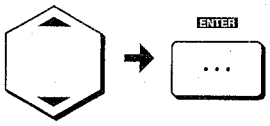
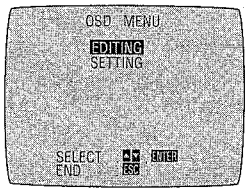
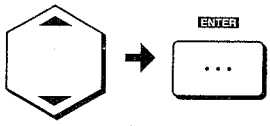
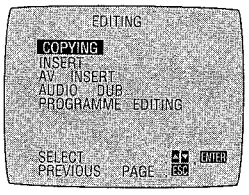
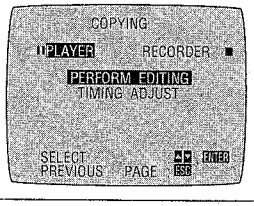


Manual Editing

Dubbing

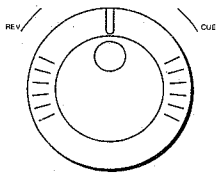
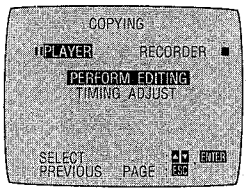
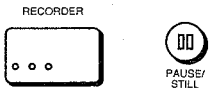
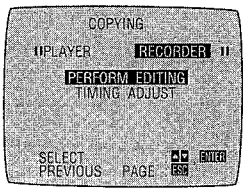
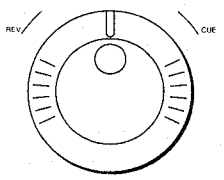
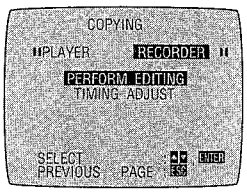
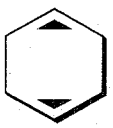
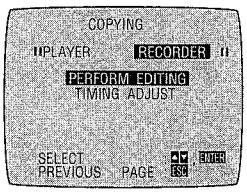
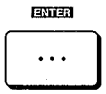
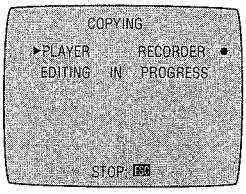
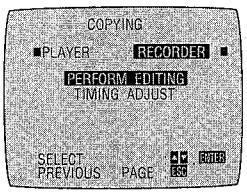
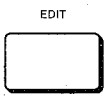
Preparation

- Insert the recorded cassette into the Player and a cassette with intact erasure prevention tab into the Recorder (RTV-966).
- Check the colour system (PAL B/G or Secam B/G) of the recorded cassette.
  If the cassette has been recorded in the "Secam B/G" system, press the PAL/MESECAM button on the Recorder to make the "MESECAM" indicator light up.
- Make sure that the VIDEO MODE switch on the Recorder is set to "AUTO" or "COLOUR".

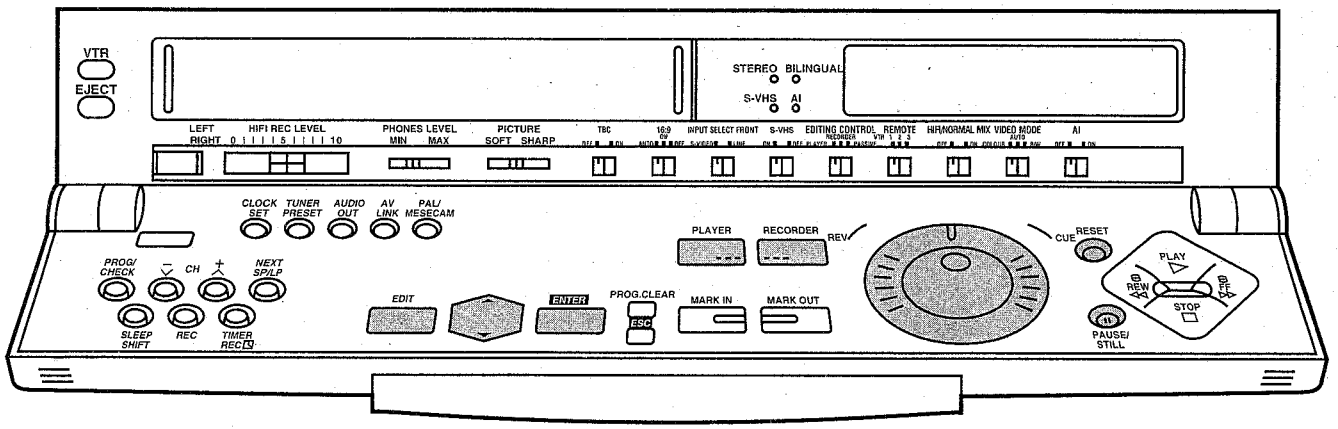
Procedure	On-Screen Display	Remarks
1		Press the EDIT Button.
2 		Select "EDITING".
3 		Select "COPYING".
4		Press the PLAYER Button and the PAUSE/STILL Button. • The playback picture of the Player appears on the monitor.

ENGLISH

Editing functions

Procedure	On-Screen Display	Remarks
5 		Search for the beginning of the scene to be dubbed on the Player's tape.
6 		Press the RECORDER Button and the PAUSE/STILL Button. ●The playback picture of the Recorder appears on the monitor. ●Steps 6 and 7 need not be performed when a non-recorded cassette is used.
7 		Search for the point where dubbing is to begin on the Recorder's tape.
8 		Select "PERFORM EDITING".
9 		Press the ENTER Button. ●The editing operation begins.
10		Press the ESC Button to stop the editing operation.
11 		Press the EDIT Button. ●The on-screen display disappears from the monitor.

Editing functions



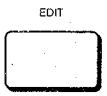
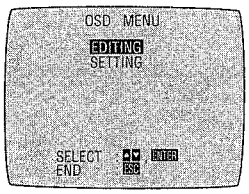
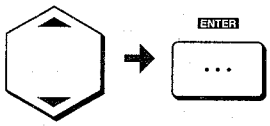
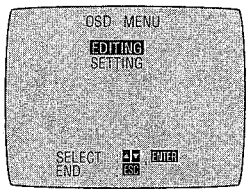
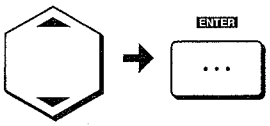
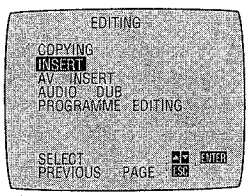
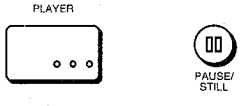
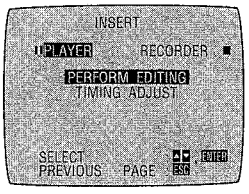
Insert Editing, AV Insert Editing and Audio Dubbing

Example: Insert Editing

- The same procedure applies to manual AV insert editing and manual audio dubbing.
- Refer also to section "Notes on Audio Dubbing" on page 95.

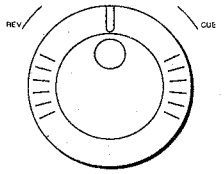
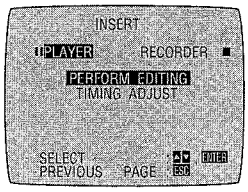
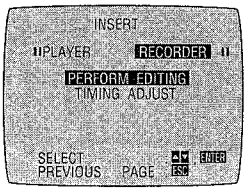
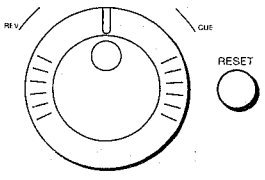
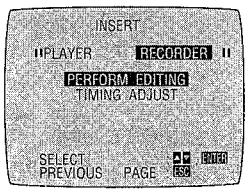
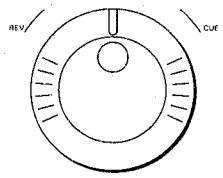
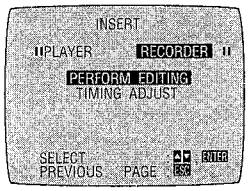
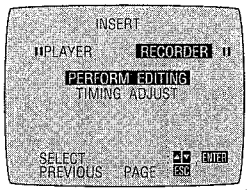
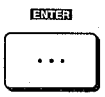
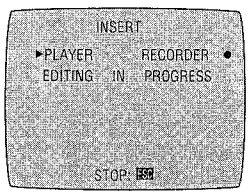
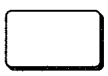
Preparation

- Insert the recorded cassette into the Player and a cassette with intact erasure prevention tab into the Recorder (RTV-966).
- Check the colour system (PAL B/G or Secam B/G) of the recorded cassette.
  If the cassette has been recorded in the "Secam B/G" system, press the PAL/MESECAM button on the Recorder to make the "MESECAM" indicator light up.
- Make sure that the VIDEO MODE switch on the Recorder is set to "AUTO" or "COLOUR".

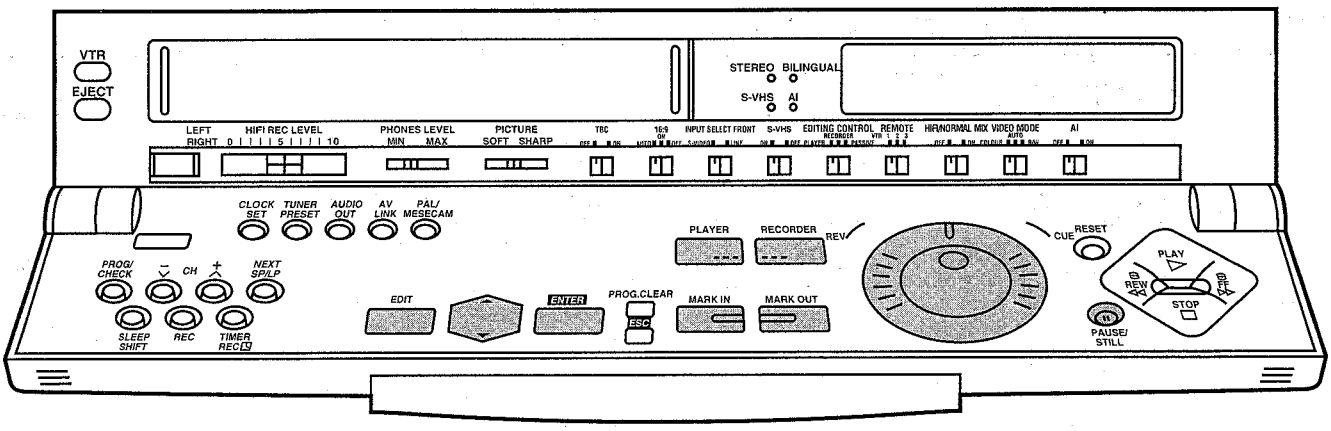
Procedure	On-Screen Display	Remarks
1 		Press the EDIT Button.
2 		Select "EDITING".
3 		Select "INSERT".
4 		Press the PLAYER Button and the PAUSE/STILL Button. • The playback picture of the Player appears on the monitor.

ENGLISH

Editing functions

Procedure	On-Screen Display	Remarks
5 		Search for the edit start point on the Player.
6		Press the RECORDER Button and the PAUSE/STILL Button. ●The playback picture of the Recorder appears on the monitor.
7 		Search for the edit end point on the Recorder and press the RESET Button during still playback. ●When the VITC function is activated, omit this step.
8 		Search for the edit start point on the Recorder and set the Recorder to the still playback mode.
9		Select "PERFORM EDITING".
10 		Press the ENTER Button. ●Editing begins. ●Editing will finish when the counter reaches 0:00.00. ●When the VITC function is activated, stop editing by pressing the ESC Button.
11 		Press the EDIT Button. ●The On Screen Display disappears.

Editing functions



Automatic Editing (Programme Editing)

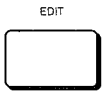
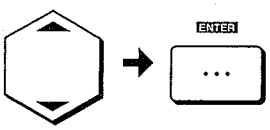
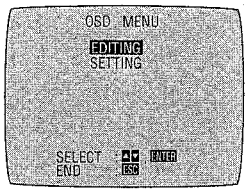
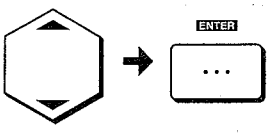
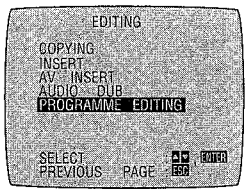
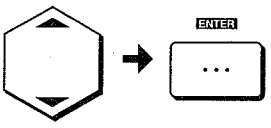
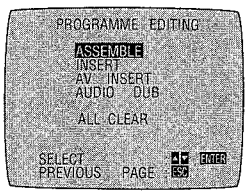
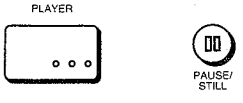
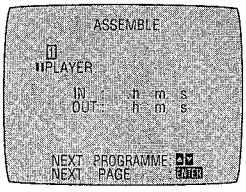
With automatic editing (programme editing) you can programme up to 10 scenes for editing in each mode (assemble editing, insert editing, AV insert editing and audio dubbing). In programming, the starting point of a scene is referred to as Cut In point and the ending point as Cut Out point.

Assemble Editing

Enter the Cut In and Cut Out points on the Player and the Cut In point on the Recorder.

Preparation

- Insert the recorded cassette into the Player and a cassette with intact erasure prevention tab into the Recorder (RTV-966).
- Check the colour system (PAL B/G or Secam B/G) of the recorded cassette.
  If the cassette has been recorded in the "Secam B/G" system, press the PAL/MESECAM button on the Recorder to make the "MESECAM" indicator light up.
- Make sure that the VIDEO MODE switch on the Recorder is set to "AUTO" or "COLOUR".

Procedure	On-Screen Display	Remarks
1 		Press the EDIT Button.
2 		Select "EDITING".
3 		Select "PROGRAMME EDITING".
4 		Select "ASSEMBLE".
5 		Press the PLAYER Button and the PAUSE/STILL Button. • The playback picture of the Player appears on the monitor.

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Short operation overview

41 Jog Dial
Used to locate the desired picture precisely.

42 RESET Button
Used to reset the tape running time to "0:00.00".

43 PAUSE/STILL ❚❚ Button
In the stop position: Still picture (Jog/Shuttle mode).
During playback: Still picture (Jog/Shuttle mode).
During recording: To interrupt recording.

44 ◀◀ Button (REW/⏪)
From stop position: To rewind the tape rapidly.
During playback or rewind:
High speed Picture Search in reverse direction.

45 STOP ■ Button
Used to stop recording or playback.

46 ▶▶ Button (⏩/FF)
From stop position: To forward the tape rapidly.
During playback or fast forward:
High speed Picture Search in forward direction.

47 PLAY ▶ Button
Starts playback.

48 Infra-red Remote Control Receiver Window
Receives the signals (data) from the Remote Controller.

49 TAPE IN Indicator
Lights up when a cassette is inserted.

50 TIMER REC Indicator
Lights up when the timer recording function is on.

51 VTR Indicator
Lights up when the VTR is turned on.

52 STAND BY Indicator
Lights up when the AC mains lead is connected and the VTR is turned off.

53 S-Video Input Socket (S-VIDEO IN/AV3)
For connecting the RTV-966 to another VTR or a signal source that is equipped with an S-Video Output Socket.

54 Video Input Socket (VIDEO IN/AV3)
Used for connecting the video cable of a video camera or a second video recorder.

55 Audio Input Sockets (AUDIO IN/AV3)
Used for connecting the audio cable of a video camera, a Hi-Fi stereo system or a second video recorder.

56 Editing Control Socket (EDIT)
Used for connecting a movie camera or another VTR equipped with an edit socket or an editing controller.

57 Synchro Edit Socket (SYNC. EDIT)
Used for connection to a Blaupunkt Camera Recorder (VHS-C/S-VHS-C) or VTR for synchro editing.

58 Microphone Input Socket (MIC)
Used for connecting a microphone.

59 Headphone Jack (PHONES)
For connecting stereo headphones.

REAR

60 Antenna Output Socket (RF OUT)
Used for connecting to the TV antenna socket.

61 Antenna Input Socket (RF IN)
Used for connecting your antenna system.

62 Channel Selector (CH ADJ.)
Used for changing the video playback channel.
(See page 99.)

63 Euro AV Socket (AV1)
Used for connecting the TV, VTR, or satellite receiver, etc.

64 S-VIDEO OUT and TEST SIGNAL Switch (NORMAL/S-VIDEO OUT/TEST SIGNAL)
NORMAL: For normal recording and playback.
S-VIDEO OUT: Set to this position only when the VTR is connected to a TV equipped with the Euro AV Socket having an S-Video Input.
TEST SIGNAL: The VTR sends a test pattern.

65 Audio Output Sockets (AUDIO OUT)
Used for connecting the audio cable to a TV, a Hi-Fi stereo system or a second video recorder.

66 Euro AV Socket (AV2)
Used for connecting the VTR, satellite receiver, or decoder, etc.
- Only used as the Input Socket.

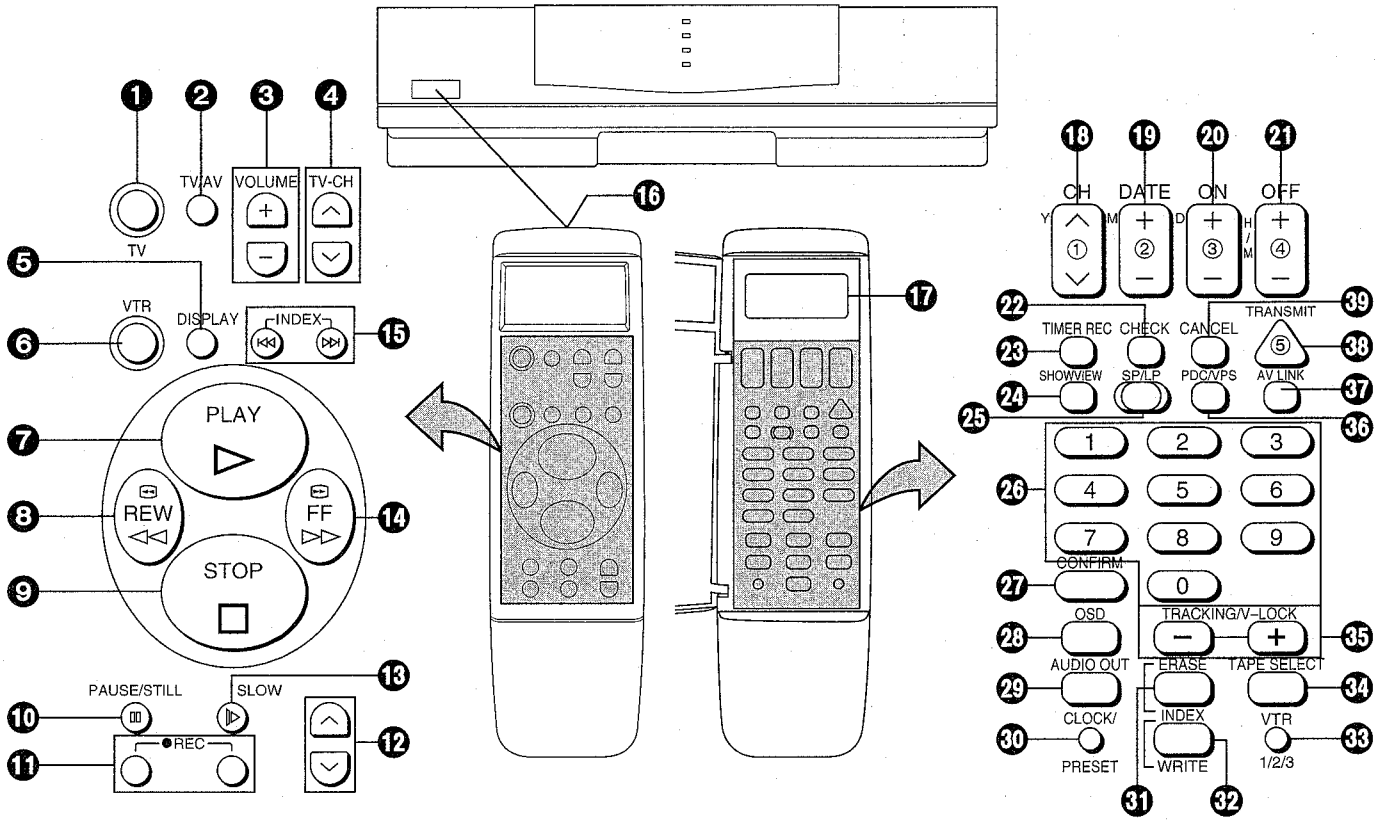
67 S-Video Output Socket (S-VIDEO OUT)
For connecting the RTV-966 to another VTR or a TV that is equipped with an S-Video Input Socket.

68 Video Output Socket (VIDEO OUT)
For connecting the video cable to a TV set or a second VTR.

69 Mains Cable Socket (AC IN)

Short operation overview

Controls and Indicators on the Remote Controller



❶ TV Button
Used to turn the TV on and off.

❷ TV/AV Button
Used to turn on the AV programme position.

❸ VOLUME Buttons
Used to adjust the volume of the TV.

❹ TV-CH Buttons
Used to select the programme positions (TV programmes) of the TV.

❺ DISPLAY Button
The indication on the display of the VTR can be changed in the following order.

→Clock→Tape running time→Remaining tape time→

❻ VTR Button
Used to turn the VTR on and off.

❼ ▶ Button (PLAY)
Starts playback.

❽ ◀◀ Button (REW/⏪)
From stop position: To rewind the tape rapidly.
During playback or rewind:
High speed Picture Search in reverse direction.

❾ ■ Button (STOP)
Used to stop the recording or playback.

❿ ❚❚ Button (PAUSE/STILL)
During playback: Still picture.
During recording: To interrupt the recording.

⓫ REC Buttons
Press both buttons simultaneously for recording.

⓬ ∨, ∧ Buttons
Used to select the required programme position (TV station) of the VTR.

⓭ SLOW Button
Used for slow motion playback.

⓮ ▶▶ Button (⏩/FF)
From stop position: To forward the tape rapidly.
During playback or fast forward:
High speed Picture Search in forward direction.

⓯ INDEX Buttons
Used for the index search functions. (See page 76.)

⓰ Infra-red Transmitter
The signals (data) of the Remote Controller are transmitted from here to the VTR.

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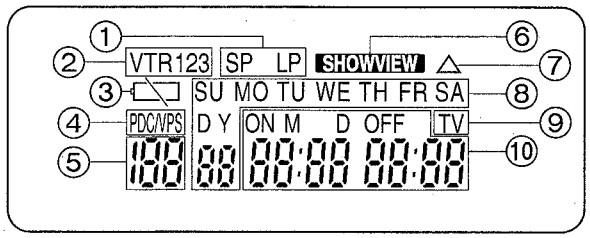
Short operation overview

⑰ Display for Remote Controller



① Tape Speed Indicator
② Remote Control Mode Indicator
③ Battery Indicator
④ PDC/VPS Indicator
⑤ Programme Position Indicator
⑥ SHOWVIEW Indicator
⑦ Transmit Indicator
⑧ Date Indicator
⑨ TV Indicator
⑩ Starting Time/Ending Time/Clock Indicator

⑱ CH (Y) Button
- Used to programme a timer recording.
- Used to set the clock.

⑲ DATE (M) Button
- Used to programme a timer recording.
- Used to set the clock.

⑳ ON (D) Button
- Used to programme a timer recording.
- Used to set the clock.

㉑ OFF (H/M) Button
- Used to programme a timer recording.
- Used to set the clock.

㉒ CHECK Button
Used to check timer programmes.

㉓ TIMER REC Button
When the timer recording has been activated with this button (the Timer Recording Indicator ⏲ is lit), the VTR can not be operated. To operate functions or change timer settings, press this button again.

㉔ SHOWVIEW Button
For programming timer recordings by using ShowView numbers.

㉕ SP/LP Button
Used to select the tape speed before starting recording.
- For normal tape speed:
  The "SP" indicator is lit.
- For half tape speed:
  The "LP" indicator is lit.

㉖ Buttons 1–0
- For selecting the programme positions.
- For entering a ShowView number.

㉗ CONFIRM Button
Used to convert the data of a ShowView number.

㉘ OSD Button
For superimposing the on-screen displays on the monitor (OSD function).

㉙ AUDIO OUT Button
Used for selecting the audio track.

㉚ CLOCK/PRESET Button
- For correcting the date and time.
- For setting the guide numbers (TV station ID numbers).
- For setting the control code of the TV.

㉛ ERASE Button
To erase Index Signals.

㉜ WRITE Button
To write Index Signals.

㉝ VTR1/2/3 Button
Used to select Remote Control mode.

㉞ TAPE SELECT Button
Used to set the tape length of the used cassette type to ensure correct indication of the remaining tape time.

㉟ TRACKING/V-LOCK Buttons
Used for tracking control and still picture adjustment.

㊱ PDC/VPS Button
The VPS function for timer recording can be cancelled or reactivated.

㊲ AV LINK Button
Turns on and off the VTR indicator.
- In normal recording, "VTR" is displayed.

㊳ TRANSMIT △ Button
Used to transmit the signals (data) to the VTR.

㊴ CANCEL Button
Used to cancel a timer programming.

Additional information

Before Requesting Service

Note:
In case of a longer power failure, the clock indication goes out and the VTR cannot perform any timer recording.

Video Head Clogging

The video heads record picture signals onto the tape during recording and read them during playback and are extremely important for picture quality. However, if the VTR is operated very often and for an extremely long time, these heads may become clogged. Then, the picture signals will not be recorded correctly or playback may be very distorted.
For example, if during playback the sound is normal, but the picture is not seen or is very distorted, the VTR should be examined by a service centre.

SYMPTOM	CAUSE	REMEDY
No power supply.	Mains cable is not connected.	Connect the mains cable to mains outlet.
Power supply is on but VTR does not function.	Timer Recording Indicator "⏲" is lit.	Press TIMER REC Button.
	Safety devices are operating.	Turn off power, disconnect mains cable from outlet, then reconnect mains cable to mains outlet and turn on power again.
TV programmes cannot be received.	Incorrect antenna cable connection.	Connect antenna cable correctly.
	The indication "A1", "A2" or "A3" is lit.	Select programme position for desired TV programme.
	The incorrect operation mode (1 or 2) has been selected during TV adjusting and storing into memory.	Select the correct operation mode. (See page 62.)
Timer recording cannot be performed.	Wrong setting of recording starting or ending time setting.	Re-programme timer recording.
	Timer Recording Indicator "⏲" is not lit.	Press TIMER REC Button.
Timer recording programming is not possible.	Cassette is protected against erasure.	Cover tab hole with adhesive tape or slide safety lug to the right.
	The clock blinks "0:00".	Set the clock to the present time and programme timer.
	The EDITING CONTROL Switch is set to the "PASSIVE" position.	Set the EDITING CONTROL Switch to the "RECORDER" or "PLAYER" position.
	All timer positions are reserved.	Maximum of 8 timer recordings can be programmed at the same time.
Recording or receiving through Euro AV Socket or S-VIDEO IN/ VIDEO IN/AUDIO IN Sockets is not possible.	Indication for a programme position (1–99) is lit.	Select the indication "A1", "A2" or "A3" with ∧/∨ Button.

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Additional information

SYMPTOM	CAUSE	REMEDY
Recorded programmes with bilingual sound or stereo cannot be played back.	Incorrect audio playback mode.	Select the correct audio playback mode with the AUDIO OUT Button. (See page 71.)
Playback picture has large amount of "snow".	TV is not properly tuned to the VTR's video playback channel.	Precisely tune the TV to the VTR's video playback channel.
	Video heads are clogged with dirt or are worn out.	Have the VTR examined by a video service technician.
TV programmes cannot be selected on the TV.	The "VTR" indicator is lit.	Press the AV LINK button to turn off the indicator.
Recorded cassette is played back only in black-and-white.	Incorrect colour system was selected during dubbing (copying) or playback.	Select correct colour system with PAL/MESECAM Button during dubbing and playback.
	The VIDEO MODE switch is set to "B/W".	During recording and playback this switch must be set to "AUTO" or "COLOUR".
Remote Controller does not function.	Remote Controller is not being pointed at Infra-red Receiver Window on VTR.	Point it correctly at Infra-red Receiver Window on VTR.
	Distance is too big.	Use the Remote Controller within 7 m of VTR.
	An obstacle is between Remote Controller and VTR.	Remove the obstacle.
	Batteries are low. The symbol " ⊏⧸⊐ " is lit.	Replace the batteries.
	The remote control modes VTR1, VTR2 or VTR3 do not match the Remote Controller mode.	Select the correct remote control mode. (See page 98.)
Data transmission from Remote Controller to VTR cannot be performed. There is a double beep (beep-beep...beep-beep...).	VTR is off.	Turn VTR on.
	VTR is in an operation mode e.g. playback.	Set VTR to stop mode.
	All timer positions are reserved.	Maximum of 8 timer recordings can be programmed at the same time.
The OSD (On-screen display) function cannot be called.	The EDITING CONTROL Switch is set to the "PASSIVE" position.	Set the EDITING CONTROL Switch to the "RECORDER" or "PLAYER" position.
The RESET Button does not function.	In this editing setting, "EDITING WITH VITC" has been selected.	Change the setting to "OFF".

Additional information

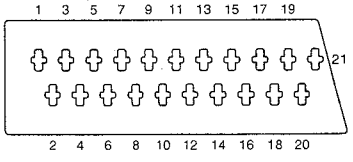
Specifications

RTV-966EGC

Power Source:	220–240 V AC, 50–60 Hz
Power Consumption:	Approx. 41 Watts

Tuner Section:	Channels 01–69 Special channels S01–S41 (S21–S41 available only for 8-MHz frequency step)		
Video Recording System:	Multi-video head system VHS/S-VHS helical scanning system		
Tape Speed:	SP; 23.39 mm/sec. LP; 11.7 mm/sec.		
Video Head System:	4 heads, 1 flying erase head		
Tape Format:	VHS/S-VHS video cassette		
Record/Playback Time:	SP; 240 min. with M-E240 VHS LP; 480 min. with M-E240 VHS	SP; 260 min. with S-260 S-VHS LP; 520 min. with S-260 S-VHS	
VIDEO			
Television System:	CCIR; 625 lines, 50 fields, PAL colour signal		
Input Level:	VIDEO IN Socket (PHONO);	1.0 Vp-p,	75 ohm, unbalanced
	EURO AV Socket (AV1/AV2);	1.0 Vp-p,	75 ohm, unbalanced
	S-VIDEO IN Socket (4 pin);	1.0 Vp-p,	75 ohm, unbalanced
Output Level:	EURO AV Socket (AV1);	1.0 Vp-p,	75 ohm, unbalanced
	S-VIDEO OUT Socket (4 pin);	1.0 Vp-p,	75 ohm, unbalanced
	VIDEO OUT Socket (PHONO);	1.0 Vp-p,	75 ohm, unbalanced
	RF Modulator;	UHF channel 36 (±4),	75 ohm
AUDIO			
Input Level:	AUDIO IN Socket (PHONO);	−10 dBV,	more than 47 kohm
	EURO AV Socket (AV1/AV2);	−6 dBV,	more than 10 kohm
	MIC IN Socket (Ø3.5);	−70 dBV	
Output Level:	AUDIO OUT Socket (PHONO);	−8 dBV,	less than 1 kohm
	EURO AV Socket (AV1);	−6 dBV,	less than 1 kohm
	HEADPHONE Socket (Ø3.5);	−30 dBV,	8 ohms
Audio Tracks:	1 normal track (mono), 2 Hi-Fi tracks (stereo)		

Connections of the Euro AV Socket:



1 AUDIO OUTPUT CH2 (R)	8 SWITCHING VOLTAGE	15 *
2 AUDIO INPUT CH2 (R)	9 GREEN GND	16 BLANKING
3 AUDIO OUTPUT CH1 (L)	10 No connection	17 VIDEO OUTPUT GND
4 AUDIO GND	11 GREEN	18 VIDEO INPUT GND
5 BLUE GND	12 No connection	19 *
6 AUDIO INPUT CH1 (L)	13 RED GND	20 VIDEO INPUT
7 BLUE	14 BLANKING GND	21 GND

*Selector position NORMAL; 15 RED, 19 VIDEO OUTPUT
S-VIDEO; 15 C OUTPUT, 19 Y OUTPUT
RGB reservation for only E/E operation

Horizontal Resolution:	Colour; more than 240 lines (VHS) Colour; more than 400 lines (S-VHS)
Dynamic Range:	Audio; more than 90 dB (Hi-Fi audio track)
Audio Frequency Response:	20 Hz–20 kHz (Hi-Fi audio track)
Wow and Flutter:	0.005% Wrms/Hi-Fi
Surrounding Temperature:	5°C–40°C
Operating Humidity:	35%–80%
Operating Position:	Horizontal position
Weight:	7.0 kg
Dimensions:	430 (W)×120 (H)×397 (D) mm

ENGLISH